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15¢

FALL  
ISSUE

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G. E. BROOKS,  
Inventor

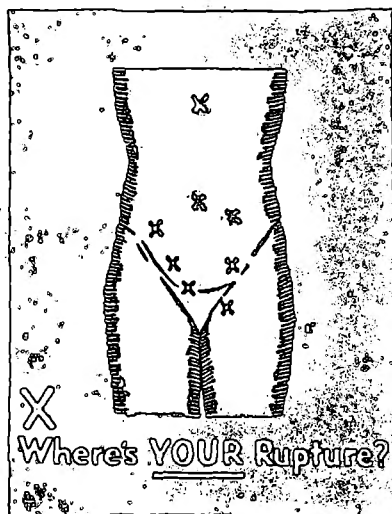
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# THRILLING WONDER STORIES



*The Magazine of Prophetic Fiction*

Vol. XXVI, No. 2

Fall, 1944

## Next Issue



### FOG OVER VENUS

A Novel of  
Pioneer  
Space Adventure

By  
**ARTHUR K. BARNES**

### PI IN THE SKY

A Hilarious Novelet

By  
**FREDRIC BROWN**

### STOP, THIEF!

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By **MURRAY LEINSTER**

Marooned in a Weird Universe of Frozen Time, Harry Brett and Laura Hunt Battle to Balk the Destructive Plans of Professor Aldous Cable and Seize an Invention That Holds the World Enslaved!

11

#### Other Complete Novelets

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Joe Dunn and Julie Are the Sole Survivors in a Vast City of Silence and Death!

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ON THE COVER: Painting by Rudolph Belarski depicts a scene from *BEYOND THE VORTEX*, by Frank Belknap Long.

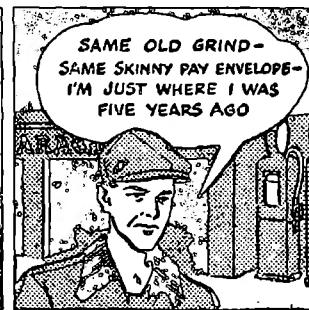
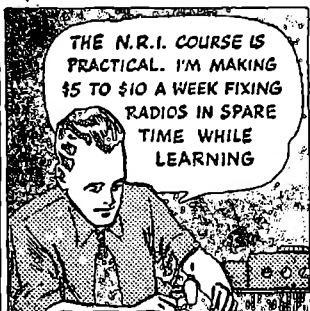
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November, 1944, Issue

PRINTED IN THE U. S. A.

Read our Companion Science Fiction Magazine—**STARTLING STORIES**





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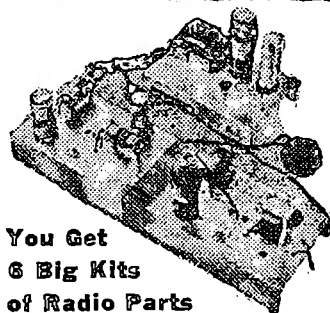
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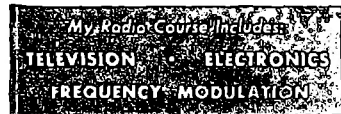
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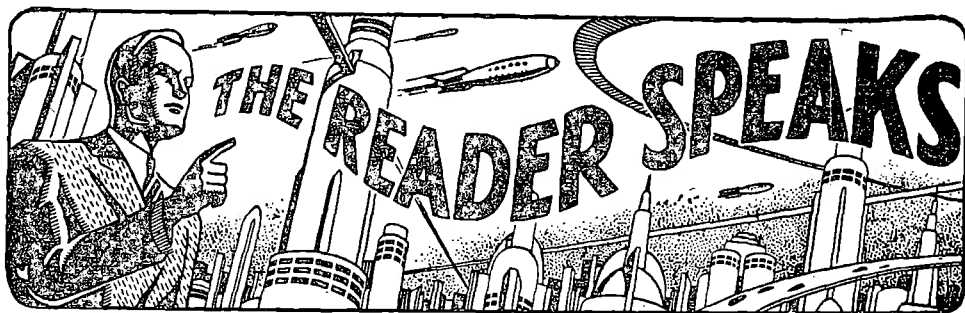
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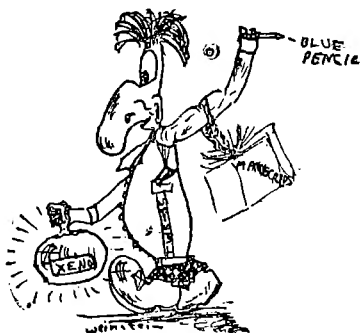
## A Department Conducted by SERGEANT SATURN

**U**NDULATING umbras of the seven moons! This business is going too far, even with the jug of Xeno poised neatly in the fork of a Uranian silicon tree so that a healthy swig merely requires a tug on the string to tip it and an open mouth beneath. Ooops—that's better.

But to get back to a less pleasant topic, some semi-crystallized son of an otherwise barren asteroid of the ninety-second sub-magnitude has carried this business of lampooning the old Sarge too far.

Kiwi Joe Kennedy's cartoon last issue was bad enough, implying that a slight fondness for Xeno requires use of a rocket pistol with which to shoot entirely phantasmagorical Venusian wrigglers.

Now this unbucolic space crater—Al Weinstein is the label he gives himself and New York City his address—has the Ganymedeian gall to call himself "Genius, etc." Murder, etc., would hit a lot closer to home.



Get a load of that head of hair, War-tears! Nothing even faintly like it has ever been seen in the System short of the fungoids on Mercury. And, Al, contrary to your fondest beliefs, the old Sarge does have an upper lip. A full spaceship cargo of giant Martian scalions to you, brother. And that dropped waistline!

But thanks for the small sop in the way of a Xeno jug—not that a meagre half-portion like that would make even one good swig for the Sarge. Upper lip or no, the Sarge can still put the magic nectar away. Frog-eyes! Shove us another jug—no, you Polarian idiot,

the two-gallon size. I'll need it to take time out for a glimpse of what lies ahead. Okay, rockets away.

## LOOKING FORWARD

**Z**OOMING out from around the rim of the sun is a thrilling complete novel for our next issue, **FOG OVER VENUS** by Arthur K. Barnes. This is a story we are particularly proud to present, as it features a driving, stirring epic of human achievement in one of the finest pieces of prophetic science fiction writing we have ever seen.

John Buckmaster, explorer, inventor and friend of mankind, solves the problem of making Venus habitable for humans by a titanic effort—not only against the elements of that damp, fog-shrouded inner planet, but against the cold-blooded determination of his backers to turn the venture into one of profit for the few rather than the good of all.

It is a knock-down and drag-out struggle that will have all you kiwis and pee-lots hanging onto the edges of your glassine chairs from opening sentence to the final climax—with not a moment in between to draw a deep breath and relax.

Following close behind it is Fred Brown's hilarious **PI IN THE SKY**, one of the most ingenious fantasies ever written, as well as one of the funniest. With a collection of ingenious and exciting short stories and features to trail them into print, these two stories promise to make the Winter TWS an issue to be long remembered. Now let's move over to the other tele-screen and take a look at the letters.

## LETTERS FROM READERS

**T**HE hot weather seems to have put some of the Sarge's otherwise fond readers on edge. So, on the theory of eating the kohlrabi before the sirloin (is there still meat rationing on Earth?) let's take care of the gripers first.

## BRACKETING BRACKETT

By Sherman Brown, 3rd

Dear Sarge: Having come to the conclusion "The Reader Speaks" has grown dull I am now going to

(Continued on page 8)





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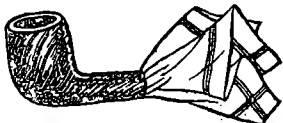
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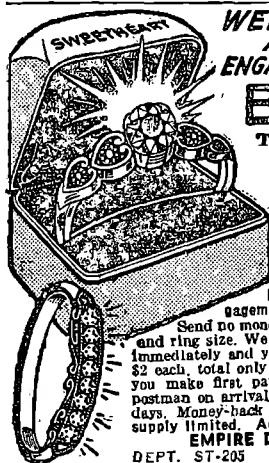


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## THE READER SPEAKS

(Continued from page 6)

do something about it. No letters by Chad Oliver, Milt Lesser. . . . What is TWS coming to? Its stories are good, its art is good, but something's lacking. That, something is a good lively row between fans in "The Reader Speaks."

Remember, fans, the contented man is doomed. Get discontented on something and gripe about it. That's always certain to start something. Other good ideas on starting a row; insult the majority of fans or even the minority, do something contrary to majority or minority opinion, or if these fail insult the authors. A good row or crusade livens things up immensely.

Sarge, I see Leigh Brackett is coming in the next STARTLING STORIES. Until now TWS & SS were top bracket SF mags. But when hams such as L. B. write stories for SS it has been well started on the road to oblivion. Let us hope that TWS doesn't go down with it. Leo Carlson is the only sensible fan in the summer TWS. He criticizes L. B. Yea Carlson.

This issue I bestow rewards on the following:

A BSFHM (Brown's Science-Fiction Honor Medal) to Leo Carlson.

A BSFDSC (Brown's Science-Fiction Distinguished Service Cross) with palm to Ross Rocklynne.

A BSFDSC to Albert De Pina.

A BSFYUKPD (Brown's Science-Fiction Undistinguished Kitchen Police Duty) to Joe Kennedy.

These awards were given in recognition of services rendered the cause of advancing SF. Highest to Carlson because of his stop Brackett campaign, the BSFDSC's with & without palm to Rocklynne & De Pina for good stories & the BSFYUKPD to Kennedy because of his pro Brackett letter. By the way the Y in the last award stands for Yardbird.

My complete list of medals includes the BSFHM (Honor Medal), the BSFDSC (Distinguished Service Medal), the BSFDSC (Distinguished Service Cross) the BSFYUKPD (Yardbird's Undistinguished Kitchen Policy Duty) & last & least the BSFLBM (Leigh Brackett Medal).

These awards are given to any fan or author or editor of SF who earns them in performance of duties furthering the cause of SF or, in the case of BSFYUKPD & the BSFLBM, for acts harmful to SF.

Sarge, you had better keep L. B. out of TWS & SS or the BSFLBM will be coming your way.

Down with Leigh Brackett

She is no Author

Unless of the lowest bracket

She is a Horror

That is the campaign poem of Brown's Crusade Against Brackett. New poems will be accepted gratefully. Anyone who wishes to join this crusade will be enlisted quickly. Anyone who starts a greater crusade against Brackett will find me a staunch ally & supporter.—1948 Lafayette, Denver, Colorado.

Miss Brackett may be no author, Kiwi Brown 3rd, but it is even more evident you are no poet. I ask you, is that a nice way to talk about a very talented lady of letters, even in fun? Wash your mouth out with the fruit of a Martian amole tree and work up a good lather, Kiwi Brown. Fie and shame!

## LOWEST FORMS OF HUMOR

By Benson Perry

Dear Sarge: I hope your quarters are comfortable at the institution where you're residing. Yep, another TWS and a horrible cover. WHY did you let that atrocity get published? WHY?

Straightening myself up to me full 8.5 feet I protest, yeh, protest. After all of this talk about the difficulty of pleasing the whole roster of fans you keep on printing covers that please the infinitesimal minority, namely those who like BEM-hero-heroine nightmares. For you must admit that the letters you get praising the covers are of a small number. It's a shame too, when Bergey is such a swell artist.

Now I feel a little bit better. Possibly because I guzzled a whole economy size jug of xeno but more likely because this is one of the best TWS's ever turned out. (I will try to forget the Ford Smith story and the screwy article insinuating that ack-ack guns are worth paying for). It was foolish publishing that what-seems-to-be-human-turns-out-

(Continued on page 99)

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Brett and Laura found Ruth bound to a chair

# THE ETERNAL NOW

By MURRAY LEINSTER

*Marooned in a Weird Universe of Frozen Time, Harry Brett and Laura Hunt Battle to Balk the Destructive Plans of Professor Aldous Cable and Seize an Invention that Holds the World Enslaved!*

## CHAPTER I

### *Infinity Machine*

**T**HERE was sunlight. There were colors. There were noises. They stood in a perfectly normal office, on a perfectly normal afternoon, in a perfectly normal world. A typist was at work in an adjoining room. There was a deep humming noise in the air, which was the city itself, vividly alive and in motion.

"And, Dr. Brett, this is my niece, Miss

Hunt," Laura's uncle said comfortably. "I think she'll be inter—"

Harry Brett's hand closed on that of the girl as she smiled at him. Her hand in his was very pleasant, and she was a very pretty girl. . .

He felt an intolerable shock in every atom of his body. It was like a blow which hit him simultaneously all over, inside and out. He had a feeling of falling endlessly and a sensation of bitter cold. His eyes were closed, and he opened them, and then he sat upright with a gasp of amazement.

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AN ASTONISHING COMPLETE NOVELET

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He was no longer standing in the office of Burroughs and Lawson, in the Chanin Building on Forty-second Street. He was sitting down—reclining, rather—in what felt like a beach-chair. But it didn't look like a beach-chair. He was out-of-doors somewhere, but it didn't look like out-of-doors! He was in a city, but it looked like no city he had ever dreamed of. His first instinct was to think that he had died, somehow, and this was the vestibule of another world. The setting was appropriate for a waiting-place beside the Styx.

Everything was gray, and everything was silent, and there were no shadows. After the first stunned, unbelieving instant, he saw that he was on a sort of terrace, as if outside a penthouse in a quite impossible universe. There was a thin dry mist everywhere, but nearby an angular structure soared skyward. It was gray, like everything else. It possessed rows of windows, but they appeared to be filled with an opaque gray material instead of glass. He saw that building over a sort of hedge which resembled box-wood, but it was gray—and there were no shadows between the leaves. Close beside him there was a climbing plant which had gray leaves, and gray stalks, and gray flowers. There was, however, no fragrance in the air. There were no smells at all. The result was startling.

But the silence was enough to crack his ear-drums. He swallowed, and the noise in his own throat seemed thunderous. The buildings stood. That was all. No movement. No life. No sound! There was not even the normally unnoticed murmur of a breeze.

He pinched himself, and it hurt. He stirred speculatively, and the cushion rustled beneath him. He stood up, and his feet made noises on the gray stone beneath the chair. To himself he seemed to make a terrific clatter as he moved across the terrace to look incredulously over the edge.

**H**IS sleeve brushed against one of the plants. There was the sound of ripping cloth. He was startled. In this noiseless gray twilight without shadows he could not credit what his eyes told him. He had torn his coat on a fragile shrub. He struck a match to see the plant more clearly. It shone out in the matchlight a dark blue-green. It looked more than ever like box. It was! But he touched a leaf, and could not believe his senses. The leaf was immovable. It was as rigid as a stone wall. It was harder than iron. He could not bend it. When he pushed with all his strength he could feel no trace of yielding. When he touched the dirt

under it, his fingers slid over the irregularities as if they had been glass.

He muttered incredulously and looked over the edge. The gray haze hid the ground beneath. It hid the sky. But he seemed to see dimly the outline of another building through it.

His match scorched his fingers. He blew it out and stared at them. His flesh was the same dead-gray as everything else. It moved and wrinkled naturally, but it looked like gray marble. He struck a second match—and his hand was normal in color.

A thought hammered suddenly at the back of his head. "Mass-nullifier! Mass-nullifier!" Then he looked around him with his throat going dry as ashes. A horrible suspicion built up in his mind. It was something to make for insanity. Because he'd been working four years on a theory that mass was not an inherent, unchangeable property of matter. He'd proved it, but he'd come upon facts so dangerous and so deadly that he'd resolved to drop his experiments and destroy his apparatus. Yet this gray world about him was proof that someone else had made the same discovery.

He had a sensation as if ice water flowed in all his veins instead of blood. He was cold all over. This gray world, this immovable plant—it could be nothing else. And there could be but one man who would have wished to do this, and it was irrevocable.

Then he heard a sound which was not of his own making. It was a gasp. He whirled, and made out a second beach-chair on the terrace. A gray figure stirred in it, and gasped again.

Dr. Harry Brett struck a third match. Its light showed color once more. The gray figure was a girl, Laura Hunt, with whom he had been shaking hands the instant before waking in this weird world.

"G-good heavens!" said the girl, staring in terror. "Where am I? What has happened?"

"I'm—not quite sure," said Brett unsteadily. "I'm trying not to believe my eyes. Haven't you any idea?"

He was not truthful. He did know where he was. When he was, at any rate. But it would be most merciful to keep her from knowing as long as possible.

"N-no." The girl's voice quavered. "There can't be any place like this!" She hesitated. "Are we—dead?"

"Not yet," said Brett in an attempt at humor.

He crawled, internally, because of what he knew. He had put a live mouse, once, into the field of his mass-nullifier. He'd turned the machine on and off again, instantly.



As they babbled desperate promises, Brett pressed the button



Where the mouse had been in its cage there was only a little heap of dust, with friable bits of unidentifiable bone and streaks of red rust. That had told him everything—why his first machines destroyed themselves by rusting until he plated them with chromium, what the removal of mass from an object meant, and the real significance of Einstein's formula for the mass and the time-rate of an object moving at the speed of light. Nobody had thought of the reverse of that formula, but he'd hit on it by accident when looking for something else. Now—!

"We're not dead," he said, steadying his voice deliberately. "I feel quite natural. I think we'd better try to find out what has really happened. We were just being introduced when this thing started," he added. He spoke urgently because he saw a terror, close to hysteria, in the girl's eyes. "Your name is Hunt, isn't it?"

"Yes. Laura Hunt. And you are Harry Brett, some sort of scientist. Can you do anything?"

"I'm going to try," said Brett. But he was utterly without hope. "First I'll take a look around. Do you want to wait here?"

"I—" The girl looked around at the dead-gray, misty surroundings. "No! I'll come with you!"

The match burned out between his fingers again. She cried out.

"I look like a ghost," said Brett. "I know! So do you. Look at your hands." She gasped at the gray, stony color of her skin. He struck yet another match. Her hands looked natural again.

"It's the light," said Brett. "There's no color in this world."

"There's a colored light there," the girl said faintly.

**F**ROM inside a gray doorway, across a gray room, down a gray hallway, came a subdued yellow glow. Brett's heart pounded. Hope would die hard, he knew. But there was only one man in the world who knew anything at all about Harry Brett's mass-nullifier. That was Professor Aldous Cable, who had been embittered by the necessity of accepting employment as Brett's assistant, and who hated him because Brett had achieved where he had not. There was no one else who could have brought this about, or wanted to do so.

"I don't suppose the light will come to us," said Brett. "I think we'd better go to it."

He tucked the girl's hand under his arm and moved toward the opening through which the light showed.

"I—really think I've gone crazy!" she said

shakily. "This simply can't be!"

Harry did not answer. They stepped through a doorway. They were no longer in the open air. But it was exactly as light, inside, as underneath the sky. The walls and ceiling and floor and furniture showed no shadows. The girl's hand had tightened with alarm. Everything was luminous—even the two of them! She caught her breath.

"Steady!" he said. "I'm just as scared as you are."

He was in a worse mental state so far as apprehension went. He knew what had happened. Einstein has postulated that there is an inherent relationship of mass and time-rate, so that if a material object—such as a space-ship—went at only slightly less than the speed of light, its mass would be almost infinite and it would move out of normal time. What seemed a second to the space-navigators might seem a century or a millennium to the rest of the universe. But there was no question now of an increase of mass to near-infinity. The question was of its decrease to near-zero!

A flashlight lay on the floor beside the hallway. It was turned on, and its beam unwinkingly illuminated a room. Where the light struck, the room seemed completely normal. Rugs and furniture. There was a woman at a dressing-table, coloring her lips.

"I beg your pardon," gasped Laura Hunt. "Will you answer a question?"

The woman did not move. She was unnaturally still. She was motionless as a stone is motionless. Brett moved forward. He touched her shoulder. It was as immovable as a mountain. Sweat started out on his forehead.

"What is it?" asked the girl, shivering.

"It's what I was afraid of," said Brett grimly. "But this light shouldn't work, and it does. Let's see!"

He touched the flashlight. It yielded. He picked it up. It was a perfectly ordinary flashlight with dry batteries inside.

"Maybe this is intended to make me hope," he said with a flash of bitterness. "The spirit may be of mockery but I am to accept facts. Come along!"

He swung the flashing beam about. Wherever it touched, the ghostly, glowing walls and floors looked normal. The rugs? Brett touched one with his foot. Each separate thread was iron-hard and iron-firm. He could not bend the most minute fibre. He grimaced.

"We're intended to hope—for a while," he said grimly. "Let's see what the rest of it is."

The girl clung to him as he moved down the hallway.

"You know what's happened?" she asked him.

"Now, yes," said Brett. "I was messing around with a theory that mass mightn't be inherent in matter. Einstein says that an object could have infinite mass. The quantity of substance wouldn't change, but its mass could—and its time-rate. I wondered what would happen if you reduced an object's mass to near-zero. And I've found out."

They came to the open door of the apartment. The flashlight showed them elevator-doors. Harry Brett pushed his thumb against a call-button. It was immovable. He turned off the flashlight.

A flickering yellow glow showed in the stair-well. On the next landing down, a highly commonplace candle burned smokily, stuck in the neck of a bottle.

"I see!" said Brett bitterly. "Cable's arranged this. It couldn't be anyone else. He was my assistant and helped in my experiments. I made a machine which would take the mass out of anything within its field. It was only part electrical, but it worked. I didn't like what I found out, though. Einstein says an object can have infinite mass and a time-rate which is nil."

**C**AUTIOUSLY they went down the steps. He leaned over the stair-rail and saw other yellow glows below them. Markers, evidently, to lead them to some intended destination.

"I found a way to make a mass almost nil," he told the girl. "Not quite nil, but almost. I found it implied a time-rate which was almost infinite! The obverse of Einstein's formula. If one made a space-ship—or a man—have almost zero mass, instead of one second to him or them meaning centuries or aeons of normal time—why—an aeon of his time would pass in a second of normal experience. That's what's happened to us. We're living perhaps a hundred million times as fast as normal. We could live here all our lives, and die of old age—and a clock in normal time wouldn't have clicked off a single second."

The girl stumbled. They passed another candle in a bottle. Harry held the flashlight before them and the separate steps were distinct.

"But how could it happen?"

"My assistant!" said Brett, bitterly. "Cable! He was jealous of the fact that I was getting results and he's never been able to do any really original research. When I found out what my machine would do, I stopped. It had possibilities that were too

horrible to think of. I didn't think he knew them. But it's evident that he duplicated my machine on his own, and that we're here because he used his machine on us. That's the only possibility I can think of, anyhow. Still, there are some oddities—"

He stopped. The girl shivered. They had reached the bottom of the stair-well. There was a respectable blaze of yellow light ahead. It came out of an open door and shone into an elaborate foyer and upon an absolutely rigid, absolutely motionless elevator-operator with a braided uniform. Brett clamped his jaw tightly and led the way toward the lighted door. It was most likely that he had been lured here to read a mocking message bidding him remember the heap of dust, which had been the mouse of his experiment and promising to watch for the imponderable remnant which, in normal time, would soon be Dr. Harry Brett.

He entered the door, prepared for any mockery. But he faced a desk, lighted by hundreds of candles in receptacles. He saw Professor Aldous Cable sitting at that desk, lean and dark and shaking with hatred, with heaps of hopeless calculations and diagrams before him.

"Hello," said Brett ironically. "Why did you bring us here?"

Cable ground his teeth. His features expressed at once the bitterest possible hatred and a haunting horror. But rage overlaid all of it.

"You know where you are!" he said thickly.

"I can make a pretty good guess," admitted Brett coolly.

"Then find a way to get back," said Cable savagely. "I can't!"

## CHAPTER II

### *A Fool for a Master*

**B**RETT found there was almost a community of people in the duplex apartment which had an entrance behind the desk. Cable had been working desperately on his problem when Brett and Laura Hunt arrived. Now he led them to an inner door, shaking with a rage which choked him. He flung open the door.

"Here he is," he cried savagely. "Tell him what to do."

He pushed Laura through. Brett followed quickly. The door closed. Professor Aldous Cable remained outside, his hands clenched.

The room was huge, and there were almost a dozen people in it. Four or five were men, mostly younger than Cable, and the balance were women of various types but tending toward the lean and intellectual. There was one girl of a lush, red-headed beauty, though. All of the people had one thing in common. Each had eyes which were filled with horror close to madness.

A record on a phonograph came to an end and stopped.

"Turn it on again, for heaven's sake!" someone said desperately.

A man put the needle back in its groove. It began to grind out a senseless melody which had only one virtue, that of noise. At once Brett understood. By the looks of things these people had been here for a long while, corresponding to weeks. And this world was silent, and still, and changeless. Time had stopped. Motion had stopped. Human figures in the streets glowed faintly in the gray twilight. And these people were nearly mad with horror.

A young man with a twitching face came over to Brett. "You're B-Brett?" he stuttered. "Professor C-Cable said you'd get us out of this! Are you Dr. B-rett?"

Brett nodded. The young man gulped.

"Then help us!" he cried shrilly. "We're all going crazy! Professor Cable is crazy already! We'll all go m-mad."

Tension broke. A girl cried out. The cry went around the room. There was a rush, and Brett found them crowding about him, pawing at him, babbling at him. They were nerve-racked and trembling. They were starey-eyed and shivering. All of them appeared to be hysterical. Brett pushed Laura Hunt behind him.

"Stop it," he said sternly. "Hold everything—hold onto yourselves!"

But it had no effect. The babble grew to a clamor, a wild uproar. They pulled at Brett. They shrieked at him. They gibbered at him. He was the center of what seemed to be a mass nervous breakdown. It was deafening, inarticulate, terrible. Brett was shocked to see otherwise unharmed human beings so completely shattered by long-continued horror.

The door behind Brett opened again. The tall, lean, raging figure of Cable stalked in. For the moment he was not seen, but he quickly compelled attention.

"Quiet!" he roared.

Instantly the shrieking ceased. Save for the wheezy, senseless noise of the mechanical phonograph at the other end of the room, there was dead silence. These per-

sons who had seemed so frenzied, cringed before Cable. They were like people stricken dumb. Fearfully they moved back. But they looked even more fearfully from Brett to Cable and back again.

"Answer his questions," stormed Cable. "Tell him what he wants to know. Do whatever he tells you. But be quiet!"

He did not look at Brett. He went out of the door again and closed it behind him. There was a terrified hush. Brett felt a trembling hand upon his arm. It was Laura, wide-eyed and white. He covered her hand with his own.

"Steady!" he said in a low tone. "I didn't look for anything like this, but it's a darned sight better than I did look for."

He understood, now, why he had been allowed to waken on that terrace out-of-doors, in a still unidentified apartment. Cable was frantic with rage because he had been forced to call upon Brett. He had wakened Brett high overhead, and led him down the long stair-well by lighted candles to mark the way, because it was intolerable to him to face Brett. By having Brett waken and find out for himself that he was in a world where time had stopped, he could avoid having to explain the facts that Brett was forced to discover.

Now by thrusting him among these poor devils for further explanation he could avoid otherwise necessary face-to-face talk with the man he envied, hated, and had robbed. He could have made the explanations ten times more clearly himself, but he hated Brett so vindictively that he must have someone else beg the aid that he needed, himself. So Brett must learn all necessary facts indirectly.

**H**E FACED the nerve-racked people sternly.

"Sit down!" he commanded. "I just got here. I know what all this is about, but I've got to find out what's happened in order to fix it. Sit down and answer some questions."

He could guess something from the types of the people before him. They were the sort of persons who would flatter Professor Cable's vanity—and he had an enormous and insatiable vanity. Cable had been a brilliant student, and great things were prophesied for him. He'd been the youngest full professor of physics in America, for a time. But his reputation had never increased. He was a poor instructor because of his arrogant, contemptuous manner toward his pupils. Professor Cable had contributed nothing in the way of original re-



search except pretentious papers announcing enormously important discoveries which never quite checked up. In the end he'd been asked to resign his professorship because of an attempt to win recognition for an alleged discovery by blatant trickery. The fact was simply that he was not qualified for original and independent work, and his vanity would not allow him to admit it. But he was a capable man under direction, and as Brett's assistant he had been useful enough. Now, though, Cable had certainly managed to mess things up!

"I suspect that most of you knew Professor Cable before this," said Brett. "A sort of coterie, eh?"

It was true. One trembling voice offered a fact, and another offered another. In minutes Brett had their part in the picture.

Cable had surrounded himself of evenings with an admiring group because of his pretensions to enormous authority and prestige as a scientist. He fed upon their admiration—and was galled by his subordinate position to Brett. Brett's success with the mass-nullifier research had filled him with raging envy because he could not claim it for himself. And when Brett ruefully decided that his results were too dangerous to be published, Cable had no reason to be discreet.

He boasted to his admirers of the mass-nullifier, as if it were his own discovery. He painted a picture of a journey in a time-field, when as the field operated the world seemed to stop dead in all its affairs, the light of the sun slowed so that its yellow glare faded to deep red and went out, and a man would see briefly by slowed-up X-rays, and then later by the ghostly light of cosmic rays themselves. As the time-rate went up and up, Cable had said, there would come at last a ghostly gray light which would be that of the infinitely short vibrations which are gravitation. And he pictured such a journey as possible in the machine he told them he had devised.

One of his admirers quoted Wells' "The Time Accelerator," and spoke of the opportunity such a device would offer to criminals. Cable explained, tolerantly, saying a person in such a monstrously accelerated time-rate could easily see objects which moved too fast for ordinary perception. A bullet in mid-flight would seem stationary, to him. Even a lightning-flash would seem the most deliberate of motions. But his own efforts would be too brief to affect any object still remaining in a normal time-rate. Nothing which moved more slowly than miles per second would seem to him to stir. For him to thrust

at a thread with all his strength would be an application of force for such an infinitesimal fraction of a second that he could not stir it enough for him to see its motion. He could not raise it to a speed of miles per second—stated in normal time—with a thrust which—again in normal time—might last only for millionths or billionths of a second. And of course he couldn't steal anything or kill anyone.

"Unless," Cable had explained, "he took another machine with him and brought the thing he wanted to steal or the man he wanted to kill into his own fast time-rate."

Then he started. The phrase was a flash of pure perception. It was probably the most brilliant thought Cable ever had in his life. He'd already made a mass-nullifier of his own. It worked, as he knew, because it converted the energy of mass into the energy of time-speed. He had not tried it, but he was confident that it would work better than any Dr. Harry Brett had made because of an "improvement" he had made in the design. Now, having caught at this new inspiration, he embodied a second mass-nullifier. He got in the field of the first machine, carrying the second. He turned on the first. The light of the sun turned red and died. Ultimately he saw a dull-gray misty twilight which was the earth's gravitational field changed into light by the incredible time-rate to which he had attained.

The fawning, nerve-racked folk told all this to Harry Brett in the great living-room in which they were camped like looters. They could not explain much more, but he could fill additional details for himself.

CABLE had used the second machine. He had been able, of course, to march through the utterly soundless city, and when he coiled the machine's field-cable about an object in normal time—an object he could not possibly stir—and threw the switch, that object came into accelerated time, and he could do as he pleased with it. He opened doors and entered banks and jewelry shops. He gathered himself a king's ransom in portable but stolen wealth. Yet he was inherently a fool. He needed admiration. Having gathered riches, he craved applause.

He found one member of his coterie, seemingly frozen and certainly immobile like the rest of the world. He encircled her with the field-cable—it was the lushly beautiful red-head—and brought her to consciousness in the world of gray twilight. Her name was Ruth Jones. She was a girl cub reporter. Maybe Cable had some idea of getting pub-

licity through her story. But the girl instantly became hysterical with terror. She clung to him, however, because he was alive in a world which was like a nightmare of death. He was not afraid—he was a fool—and her terror made him feel strong and admirable. He found others of his usual circle of admirers. They wakened to find themselves in this world of no-time, this world of an eternal now. They were terrified, but they followed him docilely because only he could take them back to the normal world.

For days he exulted in his strange position. He was lord of the treasures of the Earth. There was no single object upon the globe that he could not take if he wished. He was master of the lives of those he had brought here. Food? There was food in plenty all about, but it was gray and faintly luminous unless a light from a high-time-rate light shone upon it. And even then it was utterly unreachable. It could not be moved or taken or eaten. Even water could not be drunk unless Cable used his mass-nullifier to turn it to liquid. His victims could not defy him. They could only fawn upon him for life and the means of living.

"He must have had a swell time," said Harry Brett grimly. "The man's crazy with vanity. But you left something out. There's a great deal of jewelry around."

There was. Even the men had jewelry wherever jewelry could be put. They looked uneasily at each other. But Dr. Harry Brett was now their only hope. So they told him that Cable had, on occasion, grandly distributed largesse. He was master of the treasures of the world. He let them help themselves to wealth. Every one had a small fortune in gems or paper money hidden away in their clothing. But they would give it all, they babbled fearfully, to see sunlight once more and to hear noises that other people made.

"No doubt," said Brett. "But why can't he take you back?"

Voices lowered. They looked fearfully at the door. At long last, they said, Cable had consented to return them to the normal world. They had all trooped within the field-cable of his original machine. They were rich, but even then they were nervous and jumpy. Whenever Cable scowled at them, they were filled with panic. Finally he had taken his own place among them and thrown the switch!

Nothing had happened. Nothing had ever happened. He'd worked feverishly, even frenziedly, and a dozen times they'd got within the field-cable's circuit, but they could

not return to normal time. They were marooned in this world in which time did not pass, this world in which it was eternally now.

That had been a long time ago. A terribly long time ago. The machine would only work to bring things from normal time-rate into this, but it could put nothing back!

"He made the machine and got himself here, and got you here, and then couldn't get back," said Brett, ironically. "Rather stupid, eh? So at last he had to bring me here! And I happened to be shaking hands with a girl, and he couldn't speed up the time-rate on one of us alone, so he brought us both. The man's a fool!"

The door opened again. The lean dark figure of Cable appeared. His eyes blazed. It was plain that he had listened to every word. His followers cringed. He was trembling with rage.

"You think I'm a fool, eh?" he rasped. "Very well. Come on and get to work! I'm the boss this time. You're working for me. You'll make that machine work or I'll have these people roast you over a slow fire until you do. They'll do it if I order them to. Or else I'll go away and leave them alone!"

Brett saw stark panic intensified in the eyes of Cable's victimized admirers. To be abandoned by him meant a death of horror. If Brett failed, they would obey any order he gave. Brett shrugged again.

"Naturally I'm going to try to make the machine work," he said scornfully. "I want to get Miss Hunt back to normal time, and these poor devils too. But I doubt if you intend for me to join them."

"Right!" said Cable between grinding teeth. "You are quite right. I don't. Come get to work."

### CHAPTER III

#### *Murderous Despot*

**P**ROFESSOR CABLE, Dr. Harry Brett and Laura Hunt walked along a street which was like a nightmare. It was recognizably Park Avenue, but only because of the iron-railed grass plots in the center. Their footsteps echoed hollowly upon the pavements. They passed frozen gray shapes on the sidewalk—once a man alone, startlingly perfect as a sculpture in gray stone, but horrible because he was not stone at all. At a little distance he was terrifying because

there were no shadows anywhere about him. As he was left behind he appeared to merge into the mist as if withdrawing from substance to become a wraith again. Once they passed a stout woman and a child. Then three young girls together, with trimly-shaped legs—and no shadows.

There were cars in the roadway, too, and they seemed to be mere convolutions of the mist until one drew near. Then they were sardonic mockeries. It seemed as if all this world of gray mist were some gigantic mockery. Fog formed into stone as one drew near, and reverted into fog as one went on.

But the gray shapes were not stone, but human beings petrified in time. And the definite fact that this was Park Avenue was ironic, too, because these humans were faintly luminous, the mist was luminous, and the feeling was that of walking in the maliciously amused dream of a dreary, silent demon. All appeared to be unreal because of the lack of shadows. All appeared ghastly because everything glowed of its own light. Everything reeked of a stilly gray horror because of the deathly silence and the mist.

Professor Cable turned off Park, and led along a twisting route they could not identify. They did not speak. Cable seemed to be filled with an almost overmastering fury. To a man of his rabid vanity, who had demonstrated that he was a fool, the unforgivable insult was to call him a fool before his victims.

He turned, suddenly, and led the way up two low steps, turned again, up two flights of stairs, and unlocked a heavy door. He struck a match and lighted candles. As their light grew, the room's interior changed from a featureless gray cavern to a rather musty small workshop. It might have been the shop of a model-maker or of someone who constructed specially designed bits of hand-made jewelry. There was a sturdy safe in one cor-

ner. On a workbench by a foot-power lathe and drill, there were various metal parts.

"Here's where I've worked," rasped Cable. "I've built two extra nullifiers, from beginning to end, because I couldn't find anything wrong with the ones I had. But they work no better."

He brought his hand out of his pocket. It held a squat pistol.

"I'm going to lock you in here," he announced savagely. "The window is barred. I'll bring you food. You can't break down the door. I've made everything ready for you. There's one of the nullifiers. It will bring things to our time-rate, but it won't send them back to normal. Find out what's the matter."

He ground his teeth with anger.

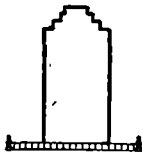
Brett looked at the familiar object on the bench. It wasn't chromium-plated, as he'd made them, but that should make no difference. Cable's device was merely a small brass case with a control-switch on it—Brett's models had had the switch at the end of a small flexible cord—and a length of flexible field-cable. Inside the case there would merely be a very simple electronic circuit—without tubes, however—a pair of condensers, and two oddly-shaped bits of metal which actually generated the nullifying field and which determined the direction in which the field operated. Very little energy was required, astonishingly little. Brett suspected that this machine actually simply produced a condition in which the static energy of mass converted itself into the kinetic energy of time-velocity. But now he only glanced at the nullifier.

"Find out what's the matter and then you'll kill me," he said drily. "Of course! Two men mustn't know how to make these things. It's too dangerous. But I'm going to try to kill you too, Cable. I mention it [Turn page]

# TEST SIGHT

# TASTE RIGHT

If the ladder is placed against building, how far up will it reach?



ANSWER.

It will reach exactly to the top of the building.



because you don't dare kill me, yet."

Cable snarled savagely as he backed out of the door, his weapon held ready. The heavy door closed. The lock clicked. Then, with somehow the effect of frenzy, the door thumped as two heavy bars went across it top and bottom.

Brett picked up one of the candles and held it to the window.

"Barred, all right," he said to Laura Hunt. "I think I can depend on him, too, to have made sure I can't cut through the walls or floor, even if I can put them in a time-rate where it's practical to try. Let's look at this nullifier."

**B**RETT sat down at the work-bench and carefully opened the brass case containing the electronic circuit. He looked almost cursorily within. He pursed his lips and whistled soundlessly. Laura Hunt moistened her lips.

"What's going to happen?" she asked. "I still feel as if this were a dream, a terrible nightmare."

"It's worse than that," said Brett. "And if Cable gets back to normal time with a nullifier that will work both ways, it's going to be worse still. He'll be able to abduct any girl or murder any man on earth, and leave no trace. With his mania for superiority my guess is that he'd wind up trying to terrorize the world into accepting him as—heaven knows what! Emperor, maybe."

"He couldn't!"

"He could make a good try," said Brett grimly. "There's one trick he could pull which would come close to destroying cities. In fact, he could literally wreck a nation. I hope he doesn't think of it."

Then he said "Mmmh!" He was looking in the case of the nullifier. Deliberately he put the cover back on. He looked at a rack of little-used tools over the work-bench. He glanced underneath at a row of flasks, such chemicals as a man doing much soldering and perhaps a little electro-plating would have in his shop. He swung the field-cable around them and threw the switch. Then he worked with them for half an hour, arranging an odd combination of chemicals in one of the flasks. Once he paused and picked up a scrap of paper, looked at it, and put it in his pocket.

He set the flask aside, picked up the nullifier, and removed the switch from the case. With a curiously rueful expression on his face, he spliced on a section of flexible lamp-cord and connected the switch on the end of that. He checked connections and turned to the girl.

"Would you stand there a moment, Laura?" he asked her casually.

She moved to the spot he indicated, her eyes questioning. Then, quite suddenly, he vanished from her sight. She started violently.

"Sorry, I didn't think," he said suddenly, from behind her. "This thing works."

"What do you mean?"

"You stepped in the field and I turned on the machine," he told her. "You went back to normal time, frozen, immovable, like everything in normal time. Then I brought you back."

"No! I hadn't any sensation of that," she answered him anxiously.

"You weren't in normal time long enough to have any sensations," said Brett curtly. He was obscurely busy with the nullifier. He seemed almost to be wrestling with the cable.

"Can we return to the normal world, then?" asked Laura desperately. "Can we go before he comes back?"

"You were back," said Brett. "And I brought you here again. So could he. I'll send you back when I can make you safe, but I won't turn that lunatic loose with a really good mass-nullifier! I've got to jump him—"

There was clattering of the bars of the door. Laura caught her breath. Brett moved like lightning. He spilled liquid from one of the flasks onto his handkerchief. The pungent reek of ammonia came into the room. He thrust the cloth into her hand. Swiftly he leaned closer to speak into her ear.

"Cable was listening all the time through the door," he whispered. "Hold this over your nose. Be ready to rush."

The bars rang loudly as they clattered to the adamantine floor, outside. The key turned. Brett picked up the flask in which he had arranged chemicals with such care. He shook it and held his thumb as a stopper over its neck.

The door swung wide and Cable stood in the opening. He seemed to tremble with triumphant hate. His weapon bore on Harry Brett.

"So you'll jump me, eh?" he raged. "You've fixed a nullifier, so you'll jump me, eh? But now—"

The flask in Brett's hand made a tiny hissing noise. His thumb was white from the pressure with which he held it down. Now he released it. There was a tiny, indescribable sound and a jet of faintly greenish-yellow vapor shot out. It struck Cable's face. Instantly his features contorted with agony.

He flung himself backward. 'His pistol went off with a noise which sounded like the crack of doom in the awful stillness of the city.

"Come on," said Brett in a strained voice. "Cover—your face!"

**H**E SEIZED Laura's hand. He thrust her past Cable who was twisting and choking. He pushed her forcibly down the hallway. The pistol roared again, and it seemed that the explosion would crack their ear-drums. Then for a third time the gun thundered.

Brett's body jolted from the impact of a bullet. But he shoved Laura to the stairway and ran after her down the steps. They clattered on while horrible noises came from above.

"Chlorine," panted Brett. "I figured he'd be listening outside the door. That's why he left you with me—so I'd talk. The ammonia protected you, and I held my breath. Too bad the gas kept me really from jumping him."

They reached the ground-level. They raced for the open air. They fled into the gray mist. The pistol roared from a window over their heads. But Cable was strangling even as he tried desperately to kill them. The chlorine gas that Harry Brett had made from sal-ammoniac—for soldering—and the sulphuric acid used for cleaning small castings, must have caused his lungs to feel as if they were on fire. It was unlikely that he had got more than a whiff of the strangling stuff, but he would not breathe easily for an hour or more. This was the reason Cable had missed Brett and Laura with the revolver, and continued to miss them, though he fired at them desperately until his pistol was empty.

Brett led Laura this way and that until it was quite hopeless for anyone to try to follow them. Then he stopped. He was a gray, featureless figure in the world of gray mist. Laura was another. He pulled a flashlight from his pocket and turned it on himself. Instantly he was flesh and blood again.

"He nicked me with one of his bullets," he told her grimly. "I couldn't stop before, but I'm bleeding a little. Take this handkerchief and bind it up, will you, Laura?"

He was bleeding a great deal, but by tying the bandage tight around his arm, she managed to staunch the flow of blood. Then she stood still, biting her lips.

"You need a doctor for that," she said.

"We'll manage," said Brett. "I don't think the bullet hit a bone. It's going to hurt

presently, though."

They were somewhere in the middle of a wide expanse of clear asphalt. The silence was awful. It was such stillness as no human being ever normally experiences. Not only the people and the subways and the traffic were still. The breeze was still. Not even pigeons fluttered above the streets. There were not even insects. There was no sound at all.

"I suppose he's got the machine you fixed," Laura said. "Now he'll go back to normal time and leave us here to die!"

"That's what he thinks," said Brett, grinning. "But—look!"

Brett then showed the girl the object he had carried away from Cable's workshop, concealed beneath his coat, with the heavy rubber-covered wires wrapped around his waist. It was the Time Nullifier.

"Let's see if the Professor can laugh that off," said Brett.

## CHAPTER IV

### *Brett's New Device*

**F**OLLOWED by the girl, Brett led the way along a crosstown street until they came to the docks. The water below them was motionless in smooth ripples. It resembled glass. Brett tossed a coin from his pocket, and when it fell on the water, it bounced and rang loudly.

"We don't need to worry about a ferry or a bridge," he observed. "The river's frozen more solidly than it ever could be frozen by cold."

They explored a great warehouse. In the watchman's office they found a lantern. Brett produced his nullifier and brought the lantern into accelerated time. The lighted lantern gave the interior of the office an appearance of reality, and its rays disclosed a watchman's lunch-box; Brett looped the field-cable about that, too, and turned the switch. There was a thermos flask of coffee, and sandwiches. Laura devoured one hungrily.

"I'm beginning to have hope," she admitted. "If that wound of yours isn't too bad, we may be able to make out all right."

"I'll do," said Harry Brett.

But the wound was painful. Horribly painful. The bullet had gone through the muscle just below Brett's elbow, and had possibly glanced off a bone. It had not broken the arm, but Brett had lost a great deal of blood.



He began to feel the injury as the numbing effects of the shock wore off.

They found a ladder leading down to the water. They descended, and, with a lighted lantern between them, started to walk across the Hudson. Brett knew Cable had not the slightest chance of finding them, once they had taken refuge in the warren of houses on the New Jersey side of the river. But they found their surroundings weird to the extreme. As the mist closed in behind them, there was no object of any sort to give the impression of a material world. The lantern made the surface of the water look normal, and impossible to walk upon. They seemed to be suspended above a gulf of liquid into which they ought to sink. The rest of the universe was gray mist.

They walked, and walked, and walked, over the slippery frozen waves. After a long time Harry Brett found himself wobbling from weakness caused by the loss of blood. The hot coffee had helped, but he had been badly weakened.

"I thought that we could keep in a straight line by noticing the—ripples," he said with an effort. "They'd give us a direction since we can't see anything. But now we are lost."

Laura slipped her hand under his arm. It sent a stab of pain through him. He gasped. She put her arm about his waist and sturdily strove to help him that way. She did bear up a great deal of his weight. But they went on endlessly.

"Stop and rest," he panted presently. "Listen! If we can't find shore, together, you take the nullifier and go on. Sooner or later you'll reach land. If you—have to go, don't try to find me again. No hope of that. Just find some hiding-place. Some place Cable and his gang would never think of searching. Slum, maybe. Put the cable in a circle—stand inside—and throw the switch. If they don't find you, you'll be all right. You'll be back in normal time. Cable's trouble was that he didn't realize that the design of the nullifier-case was—part of the apparatus. Its shape helped form the field. When he—put a switch on the case instead of on a cord he changed the capacity constants. With the extension-cord and the switch on the end, it's the—way I designed it. . . ."

"I won't leave you!" cried Laura fiercely. "Maybe I can help!"

The lantern slipped from her grasp. It fell to the solidified surface underfoot. It cast queer shadows.

"Hold it," said Brett sharply. "Look! The shadows. That's the—wake of a boat! If

we follow it, we can get on board."

The possibility seemed to put new strength in both of them. They struggled for fifty yards more. For a hundred. The frozen eddies of the wake grew larger and more turbulent. Then they saw the boat which had made the froth. It was a gray shape upon gray water in a gray mist. It looked rather like something carved out of ice. It looked unspeakably desolate.

But when the rays of the lantern shone upon it, it lost its appearance of ghostliness and changed back to honest planks and solid untidiness. They saw its name, "Sarah J. Loomis, N. Y."

IT WAS doubly difficult to make the last few yards to its side. The otherwise mirror-smooth surface of the river was here heaved up into great, rounded, glassy mounds, over which they slid horribly. But at long last they reached the side of the tug, and Brett put out the last remnant of his strength, and Laura pushed his bulk desperately. He reached the deck.

The door of the cabin was open. Laura tremblingly adjusted the field-cable about the bunk. Its blankets and mattresses ceased to be frozen and immovable, and became soft and inviting. She helped Brett to the mattress. He almost collapsed upon it.

"Now," said Laura resolutely, "I'm going to see what I can do for you."

She left the lantern burning in the cabin. She went away with a flashlight and the nullifier. In twenty minutes or so she came back with water. Hot water. And towels. And antiseptic.

"I'm an expert with the nullifier now," she said cheerfully. "And on a boat they have everything. There's an oil stove, and the machine made it work, and water in a tank, and food in an ice-box. I opened that. When I've re-bandaged that wound of yours, I'll fix something to eat."

They stayed on the tug for a period of which there could be no measure, of course, but which must have been equivalent to days. Laura was tireless in helping Brett. At first he grew feverish and horribly weak. He repeated his instructions to her in case anything should go wrong.

"But Harry, after all, with the nullifier as you've fixed it, we can both return to normal time," she said anxiously. "We're not likely to be found here."

Brett shook his head grimly.

"My life's not important enough to be saved that way. Listen, my dear! Cable is so vain he's almost a maniac. Now that he's

trapped in this—this eternal now, he's apt to go literally crazy from disappointment. Do you realize what he could do?"

Laura nodded, her features pinched.

"He could abduct people, as he did those poor friends of his. But if you have to have a doctor, and can't help it, I don't see why you should bother."

"That's not the point," Brett told her. "It's a matter of radio-activity. Radium has a half-period of about two thousand years. Uranium's is infinitely longer, five times ten to the ninth—five billion years. Suppose Cable wanted to get even with the normal world in which he never cut a figure? Suppose he brought radium into accelerated time? What would happen? It's always three degrees hotter than its surroundings. It's always giving off heat. Suppose its time-rate were accelerated so that its half-period became a fraction of a second of normal time?"

"There's not much radium," Laura said faintly.

"Not much would be needed for damage. Figure the result if radium were brought into this time. To us, it would simply become deadly to handle. But in the normal world, if it took a full second to disintegrate, its temperature would go up to about three billion degrees, and iron turns to steam at three thousand. It would be literally one million times hotter than necessary to vaporize iron. Metal, stone, and even bricks would turn into incandescent vapor, which would give off cosmic and X-rays fierce enough to burn and maim for heaven knows how far, and would expand or explode with a violence beside which TNT would be a zephyr. But I think," added Brett grimly, "that our time-rate is faster than that. I don't think it would take a whole second for radium to destroy itself and everything around it."

Laura shivered.

"Or he could use uranium," said Brett more sternly still. "It might not seem as bad. But where there are milligrams of radium there are tons of uranium to be had. If he brought a mass of it into our time it might not create an explosion in normal time. It might disintegrate at what would seem a leisurely rate. It might take a year to destroy itself. But even a milligram of radium is nothing to play with, and this would be two thousand times as deadly. Do you know how much a milligram is? If you crush three aspirin tablets and divide the powder into a thousand parts, each part will be a milligram. A milligram of speeded-up uranium would make a nearly incurable burn in a fifth of a second, and there could be tons of it! If

Cable put masses of that stuff about New York, nobody could approach it. No metal shield could stop its rays. Its radiation would make the very air radio-active, so that a hundred miles away you might breathe in poison which would sear your lungs. The same radiation would sterilize human beings whom it did not kill, and milder doses still would cause mutations or human monsters if babies were unlucky enough to be born!

Laura twisted her hands together.

"I see," she said slowly. "You can't risk that!"

"No, I can't! And once I return to normal time I can never come back to this instant unless I'm dragged back. If I stay in normal time a single second—how many years of this time would that amount to? I have to stay here and fight Cable!" Then Brett's face became stern and implacable. "I'm stronger now. I'll be up—well—we'll call it tomorrow. I've designed a new nullifier which will take you and itself back into normal time, and then fight any other nullifier that tries to bring you back here. Get back to normal time with one of those around you, and you'll stay."

He did get up the next day, though there had been no faintest change in the gray silence about the motionless tugboat. He found a workbench down in the engine-room and worked there, with what metals and tools he found and brought into accelerated time. The members of the crew came to be familiar, standing like the naturally painted statues the Greeks were so fond of. Once, as he worked, he grinned and turned to Laura.

"I feel like I know these men," he said drily. "They've been standing around so long. It's funny that they'll never know me. I hope some day to pay them back for what we're doing to them."

"Doing to them?" asked Laura, puzzled.

"We're robbing them," said Brett ruefully. "We have to. And they're going to be very badly puzzled. For instance, there's the stove. You've brought it into our time. The cook in the galley had merely turned his back to it. When, in normal time, he turns back to it—why—it will have been rusting in this time for several centuries. It will seem to him to have fallen into a heap of rust while he looked the other way. The bunks we've rested on—we had to make the blankets and mattresses soft—won't have blankets or mattresses when they look at them. There'll be only a little fine dust there. The ice-box will be simply a pile of rust-scales and cobweb, and what food we don't

use will be simply a fine powder so long decayed it will have no odor at all. I hope to pay for this damage, but it's going to bother them. And I do hate to spoil these tools, but I need them!"

He was making two miniature nullifiers. When they were finished he tested them, and then carefully added the devices which would automatically counteract the field of any other nullifier which essayed to bring them into accelerated time.

Six meals later—as good a way of measuring time as any—he had altered the larger nullifier in the same way. He had Laura put one of the miniatures on herself. Only the cable showed, and it was not conspicuous. She could reach the tiny switch with ease.

"Now we invade New York," he told her. "As soon as we get ashore, Laura, and on solid ground, you go down into a subway station or into a phone booth somewhere, and go back to normal time. Now Cable can't bring you back to this time-rate, even if he finds you. I'll go on and attend to him!"

But Laura smiled. They were in the cabin of the tug.

"My dear!" she said with soft eyes. "Do you think I would?"

"Why not?" demanded Brett. "What else do you propose?"

"Why, I'm going to stay with you!" said Laura fiercely. "After I've known you this long, and nursed you when you were hurt, do you think I'd desert you when you were going into danger?"

Brett tried to frown at her, and failed.

"I didn't think you'd be so obstinate," he admitted. "Hmmm. You're safe, though. Throw that little switch and you go back to normal time and neither Cable nor I or anybody else can drag you back. So you can—escape me if you like. But I'm trying to guess what you'll do if I—kiss you."

He moved close to her. He touched her shoulder lightly, smiling down at her. She swayed toward him a little, her eyes shining.

Time really stood still before they separated.

"Now, I wonder why I didn't guess that, either," he said. "Come along, girl! We've got to wind up Cable so we can run down to the City Hall—in normal time, my dear—and attend to some business."

They left the tug behind them. They moved through the mist toward the New York shore. At long last they found it, and made their way up from the river's surface. Brett's first idea of finding a place to work in Jersey City had been altered by the discovery of the tug. It had turned out to be

a lucky accident as he had been able to use tools in the machine-shop which he might not otherwise have chanced upon.

"First we must go to that building on Park Avenue where Cable hangs out and learn what's happened," Brett said to Laura when they reached the street level. "We must also see what's happened to his friends."

**L**AURA looked puzzled. "But how do you know which building on Park Avenue it was, Harry?"

"The address was on a doormat at the bottom of the stair-well. I was using a flashlight freely then, you may remember. A swank apartment-house. No name. Just an address."

He threw a flashlight on a street-sign so that the numerals would show out through the gray luminosity of all objects. Then they knew where they were. They walked briskly. Harry Brett now had in his pocket a revolver which he had found on the tug, and Laura was more adequately protected, but insensibly the atmosphere of gloom and of horror affected them. The blank-windowed, shadowless buildings, and the mist, and the silence. Especially the silence!

"I'm frightened!" said Laura, under her breath, presently.

"We're there," said Brett in a low tone. "This is the door."

They went cautiously within the gray, glowing cave which was now the appearance of the foyer they had last seen lighted by candlelight. Now there was nothing. But they heard a noise. Somewhere, a woman was sobbing hysterically. It was a low-pitched, throaty gasping which grew higher and higher until her throat seemed to close. Then there was silence, and then it began again and went on, monotonous and uncontrollable. There was despair in those sobs, and horror, and something like mounting insanity.

Harry Brett switched on his flashlight. It shone through the open inner door and illuminated the figure of the lushly beautiful red-haired girl, Ruth, the girl reporter. She was bound cunningly in a chair so that she could not move hand or foot. With the beam focused upon her, she seemed the only real object in a world of unsubstantial dream-stuff. Her eyes were wide and fixed. Her features were drawn into the ultimate expression of horror. She sobbed again.

When the flashlight fell upon her, she shrieked. And instantly from all about her there burst a bedlam of cries and sobbings. It was sheer pandemonium, the inarticulate

outcry of a dozen voices. Harry Brett's flashlight swept from side to side. He saw the rest of Cable's coterie. All of them were wrapped in ropes until they were like cocoons. Only their heads emerged. Their faces now almost were the faces of mad men and women. They cried out at Brett, screaming at him, cursing him hoarsely, gasping at him, or else pleading in voices which would have melted a stone.

Laura shrank close to the young scientist. The unholy tumult made his flesh crawl. He shivered. Then he turned his flashlight on himself.

There was a sudden, stark, incredulous silence. Then the tumult broke out again. But its tone was utterly different, if no less desperate.

His fingers shaking with a sick rage, Brett struck a match. There were candles everywhere. They were not burned out. They had been extinguished only after these poor folk were rendered helpless, so that they would have only the gray twilight about them and so that they would see each other as gray and unhuman images—and so that they would go mad with the horror of their situation. Cable had left them here to suffer, as punishment for having witnessed his humiliation at his own and Brett's hands.

Brett set to work to free the nearest prisoner. When the first victim could complete his own release, Brett went on to the next. The red-headed girl fainted dead away as she tried to arise from the chair in which she had been bound. Laura lighted more candles until the room was once more ablaze with light. Toward the end of the task of releasing them, Brett spoke to them jerkily.

"I've found a way to return you to normal time," he told them grimly. "It's permanent. Cable will never be able to drag you back to this time again. But I need some help. He can do enormous damage if he isn't caught. Who'll help me catch him?"

But these men were half-crazed and utterly broken by the terror they had been through. They babbled hysterically, ignoring the call for volunteers. They only pleaded desperately to be returned to the normal world again.

In the end Brett bunched them all in the middle of the room, crowding them as closely as possible. He put the field-cable of the modified nullifier—modified at the tugboat's work-bench—around them so they would all be within its influence. Its action could not be reversed—not until they were in normal time, nor until they reversed it themselves. But by the time they had taken one breath in

normal time every object or living thing left in accelerated time would have turned to dust or crumbling oxide.

"Now listen!" said Brett savagely. "There's something you've got to do as soon as you get back. You want to get out of this building, of course. You may have trouble explaining how you got into it." He looked them over, and they were too nerve-racked to be moved by anything but terror of the eternal now. "But," went on Brett, "though Cable's device can't bring you back out of normal time, because centuries will have elapsed here before you finish drawing a breath, this machine could. Therefore, as soon as you're back, smash it! Stamp on it! Batter it flat! Wreck it! Don't neglect to do what I tell you."

They babbled desperate promises, and they were in such awful terror of return that they probably would obey his orders.

Then Brett pressed the button of the switch.

## CHAPTER V

### *A Score Is Paid*

**A** DEAD silence ensued. After the babbling, it was as abrupt as a blow. The motley group was frozen in the midst of gestures and sobs and nerve-racked grimaces. They had been returned to a normal time-rate, and they could not be drawn back to this time-rate by Cable's present instrument. Brett had an instant's weary amusement over the thought that they would never admire any other scientist. The red-haired girl, Ruth, would be so hysterical in her aversion to even the memory of this experience that it was unlikely that she would ever write any news account of it. But there were still important details to be wound up.

"Cable's still loose," said Brett bitterly. "He must have thought that you and I went off to hide somewhere and use the machine I'd repaired. He thinks we're back in normal time ourselves. So he avenged himself on the people who'd seen him defeated, and he'll try to get even with the world for his own despair. Perhaps he is hunting for us. If he thinks of bringing radium or uranium to this time-rate it would wreck the world."

"What are you going to do?" asked Laura.

"Find him!" said Brett, more savagely still. "I'm going to take you to the office where we were being introduced when all

this began. I'm going to see you back in normal time, and then I'll hunt up Cable. If I ever find him, I'll come back to normal time. If I don't find him, I hate to think what it'll mean."

He shrugged.

"Do you suppose he could be at that little workshop?" Laura asked.

"We'll see first," said Brett. "I picked up a letterhead on the workbench. Maybe it's the address."

It was. They went through the gray mist and the dreadful city. They located the doorway, two steps up, climbed stairs, and found the door which would open, and the bars which could convert the workshop into a prison. There Brett made a light and bitterly regarded what he found. He pointed to the scrapings of rubber insulation and to bits of clipped-off wire.

"There's proof that I'm a fool," he said savagely. "He knew I'd solved the problem of returning things to normal time. He heard me tell you so. So when we got away and he failed to kill us, he looked at the scraps where I'd worked. Oh, how dumb I was! He found bits of wire and insulation. He knew I'd added a flexible control to his nullifier, and it could only have been to restore the switch to its original place in the design! So he's tried it in his turn!"

A savage fury filled Brett. It was like a furious remorse, because if Cable could return to normal time, now, he could make more nullifiers and enter a new ghostly world at any time to commit inconceivable crimes with impunity. In the last analysis this would be Brett's fault, because he had first devised the mass-nullifying apparatus.

Brett groaned. Then Laura caught his arm.

"Harry! What's that?"

There was a sound in the dead city outside; an actual sound in the clamorous stillness. It was a humming sound, faint at first.

"Good grief!" said Brett. "A car!" He listened incredulously. "That's it! He figures we're back in normal time. Now he can go back when he pleases! So he's punished everybody who saw him licked, and—you see? He'll load up a car with loot and drive it somewhere out of New York, most likely. He'll return to normal time a hundred—two hundred miles away! I've got to get him now! You're all right! Go to your uncle's office and throw that switch."

Brett threw the last words over his shoulder as he plunged out of the workshop in which first he, and then Cable by studying the evidence of the work he'd done, had

solved the problem of leaving the world where time stood still. He raced through the gray mist, dodging the ghostly motionless figures which were people.

The noise of the car grew louder, died down, and grew louder still. Brett knew, of course, the logical place for Cable to go. To the place where he had left his victims, because they had gathered riches for themselves. It would be literally the one place where he could add most of his loot with the least trouble. And of course, to a man with the maniacal vanity of Cable, there would be the added attraction of proving to them their own exceeding stupidity and his wisdom.

**B**RETT halted short of his destination, his jaws taut and the revolver from the tugboat out and ready in his hand. He waited grimly. The car stopped. He heard Cable get out, invisible in the mist. He heard the car-door slam. Habit is so strong that, although believing himself the only living person at large on an entire planet in the Eternal-now time, Cable had closed the car-door behind him. He marched into the building. Brett saw the dim, yellowish glow of his flashlight. Savagely Brett moved forward.

To cut off Cable's escape, Brett went first to the car. He opened the door and fumbled for the ignition-key. It was gone. Habit had made Cable take it, before getting out of the car. Brett used his own flash to make sure. Yes, the key was gone. But the back was loaded with loot—and there was a nullifier on the front seat! Cable had been using it to gather his loot, but here and here alone he would not need it.

Brett took the nullifier away from the car. He knotted its field-cable over his shoulder. Then he heard a sound from inside the building. He could picture it in detail—Cable stunned to see candlelight flooding the foyer once more when he had left his victims in the gray twilight alone, Cable creeping cautiously to see where his prisoners had been left to go mad in hopelessness, to find the ropes strewn on the floor and the men and women in unmistakable stasis, in iron-hard immobility, returned to normal time-rate, and then Cable frenziedly trying to work the nullifier he could see so plainly with its field-cable encircling the group. He could not stir it, of course. Brett heard him cry out in his rage. He almost bellowed. Brett heard him curse horribly.

Then, an instant later, he came running and raging out of the street door. It is most likely that he meant to get his own nullifier



from the car, to fetch back his victims one by one and wreak upon them an insane vengeance for outwitting him. The point at which vanity merges into insanity is hard to find. The only offense anyone had committed against Cable was the discovery that he was a fool, but that offense had driven him to maniacal cruelty!

"Hold it!" snapped Brett coldly, from the mist. "Put up your hands!"

Cable gasped. Then he roared in crazy wrath. The gray mist was split by gun-flashes. An automatic pistol roared itself empty. Cable swerved in his running and rushed toward Brett's voice. Brett fired. Cable stopped short. He had come to have an implicit belief that only he possessed weapons. Brett fired again, though not to wound.

"You're going to drop that gun," said Brett harshly, "and put up your hands!"

Cable screamed with impotent rage. It was unearthly to hear such a cry from human lips. It echoed and reechoed from all the tall towers hidden in the twilight. Then Cable turned and plunged for the car. Brett fired yet again. Glass tinkled from a car-window.

"I only need an excuse to kill you," raged Brett. "Stop!"

The car-starter whirled. The motor caught. Cable must have moved like an uncannily precise automaton in the midst of all his passion, to have put in the key and turned it without fumbling. Gears clashed. The car roared into motion. Brett ran toward it. It rolled away.

He emptied his revolver after it, but it vanished in the mist. It turned a corner. He heard its brakes squeal, and then it roared on, and turned again. He heard its sound go away and away, headed north on one of the wide north-and-south avenues. Even a man in a passion of outraged vanity and terror could thread the motionless traffic. The car turned west. If it reached the Hudson Drive, it could go on for hundreds of miles, and pursuit would be useless and discovery impossible. And if Cable did not miss the nullifier from beside him—and with all the interior of the car a shadowless gray luminosity he was not likely to—he might go on and on until his gasoline went low and he needed more. Then he would seek out a tank-truck, or another car from which he could siphon fuel. In either case he would need the mass-nullifier to make the gasoline a liquid. And then he would discover that he had no nullifier.

Brett felt sick. But then he heard Laura

calling desperately in the gray silence.

"Harry! Harry!"

He moved toward her.

"I'm all right," he said unsteadily. "You heard the shots?"

"Did he shoot you?"

"No, but he's dead," Brett lied quickly. "Don't come here."

**HE** WENT quickly toward the sound of her voice. She appeared in the mist. She clung to him.

"I was afraid you'd been killed," she sobbed.

Brett kissed her and firmly led her away.

"We're going to your uncle's office," he said evenly. "We'll turn the switches of our two nullifiers there."

Then he stopped suddenly. He slipped Cable's nullifier from his shoulder and put it on the ground. He crushed it under his heel. He stamped it into uselessness, into a merely cryptic mass of battered metal. Then he fumbled at the next corner and dropped it into a street-drainage opening. It was in accelerated time, and if it should ever be found in normal time it would be after thousands of millions of years of its own time-rate's rusting. It would be merely a lump of oxide, which no one would think of examining.

He led the way on again. He was haunted by the knowledge of what was bound to happen somewhere a hundred or two hundred miles away, in this time-rate. Cable would discover that his nullifier was gone. He would have a car, almost out of gasoline, and probably millions of dollars in money and gems. But he would have no food or water, and there would not be one drop of water or one morsel of food anywhere on earth that he could use.

He might find his way into towns, and into groceries and fruit-markets, and feel food and drink beneath his fingers. He might cast a light upon it and look at it. But he could not stir it. He might try hopelessly to walk back to New York, because there might be crumbs remaining where he had left his victims to die. But he would never make it. Somewhere, sometime, stumbling through a gray mist, he would fall from weakness and not be able to rise again. . . . And—well—in normal time someone might notice a little heap of dust and a few fragments of rotted bone, but it would not be conspicuous. Nobody would notice a hopelessly oxidized watch or other trinket, so far gone in rust as not to be recognizable. . . .

Brett hoped Laura hadn't heard the car

in flight. If she ever mentioned it, he would try to persuade her that she was mistaken. Because there was absolutely nothing that could be done now. Nothing whatever.

"I pick your uncle's office to go, back to normal time in, because we'll make less fuss turning up there than anywhere else," he said, in an attempt at a conversational tone. "When Cable's friends turn up, in a state of nervous collapse, in somebody's drawing-room, it is going to make talk. But what we want is to get quietly down to the City Hall and get married."

She stopped, and he kissed her.

"And then, I've something to do. I've a new line to work out on those mass-nullifiers."

"No!" she said fearfully. "Once we're back in normal time, you mustn't ever touch one again."

"This will be different," he told her. "While I was laid up on the tug, I figured out a way to regulate the amount of mass one would take out of a substance. I think I can put a thing in any time-rate I want. And radium or uranium would be deadly at a time-rate approaching infinity, like ours, but if we could choose a half-period of five hundred years, or one hundred, why, that would be power! Atomic power! There'd be no reason to worry about the exhaustion of coal and oil, then."

She stopped again. Again he kissed her.

"And I'd like to make some money," he told her humbly, "because I want to give you things. Also I think I ought to pay for the damage Cable did with the nullifiers I invented. That will run into pretty big sums. And I'd like to put up a monument to him. Poor devil! He threw away his life trying to be a great man. But if he's responsible for my solving the problem of atomic power, why not a monument to him?"

"You nice, foolish darling!" said Laura, tremulously.

They went on. They went into the office

of Laura's uncle, the office of Burroughs and Lawson in the Chanin Building. Laura laughed shakily.

"Let's stand as we are," she said with a little catch in her voice.

They stood as they had been. Days and weeks ago—or maybe it was the thousandth of the thousandth of a second—Laura's uncle had said, "And Mr. Brett, this is my niece, Miss Hunt." And they'd shaken hands, and as their hands were clasped, everything began.

**N**OW they clasped hands again, smiling at each other.

"Contact!" said Harry.

They threw over the switches of the two irreversible nullifiers at the same instant.

There was sunlight. There were colors. There were noises. There were smells in the air. The world was alive around them. They stood in a perfectly normal office, on a perfectly normal afternoon, in a perfectly normal world. A typist was at work in an adjoining office. An elevator-door clicked. There was a deep humming noise in the air, which was the city itself, vividly alive and in motion.

"—My niece, Miss Hunt," said Laura's uncle, comfortably. "I think she'll be inter—"

He stopped and gasped. Because his niece—a very well-behaved young woman—walked straight into the arms of the young man to whom she had just been introduced—whom she had first laid eyes on not more than a minute before. She clung to him, and put up her face to be kissed, and caught her breath in something suspiciously like a sob of joy.

"Harry!"

Dr. Harry Brett kissed her hungrily and then spoke with an air of extreme earnestness and satisfaction.

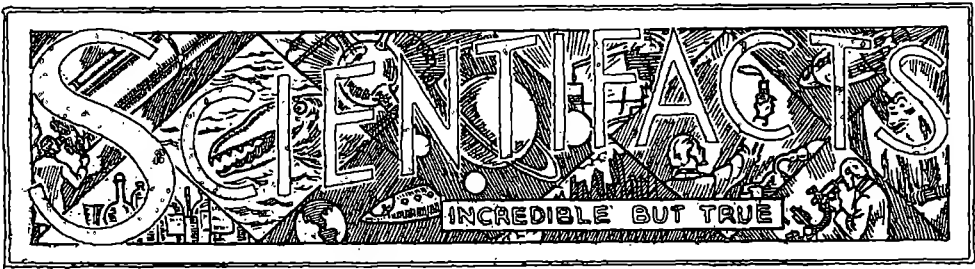
"We'd better hurry," he said. "Come on! The marriage license bureau closes at four o'clock. We don't want to be late!"



### *"I Hold Out to You on a Platter—Not a Fortune, Nor an Empire—But a Whole World! The Planet Venus!"*

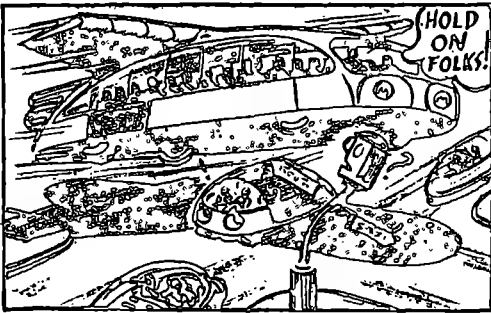
THAT WAS John Buckmaster's proposition—but wealthy earthmen whose aid he sought simply laughed at him. Why, Venus was a barren, disease-ridden land, thoroughly worthless! But John Buckmaster held on to his dream of developing and beautifying the planet—and you'll thrill to his pioneer daring in *FOG OVER VENUS*, a startling complete novel of scientific adventure by Arthur K. Barnes.

COMING IN THE NEXT ISSUE



## TOURIST SPECIAL

**H**AVE you ever cooled your heels waiting for a bus on a wintry morning while the vehicle stalled or froze up beyond the last stop? According to the motor experts of things to come after the war, you won't see so many bus breakdowns in the future. An aircraft motor, designed to operate in desert heat or arctic cold, has been modified for use in buses. Air-cooled, with



self-contained clutch and flywheel, this motor weighs one-third less than present bus motors of comparable horsepower.

It develops 162 horsepower at 2800 r.p.m. on 73-octane fuel and is designed to operate in constant use at 85 percent of full power . . . and it operates at a considerable fuel saving.

Climb aboard the tourist special, folks—leaving in one hour for all points between the North and South Poles. No motor breakdowns guaranteed.

## TOOTH PILLS

**D**ENTAL decay has been one of the chief ills of mankind for thousands of years. Dentistry of a sort was known in ancient Egypt, and doubtless the caveman suffered plenty from this decay annoyance. Attributed at various periods of history to everything from worms to heredity, recent findings show positively that it is mainly a matter of diet.

Plenty of fluorides and calcium in the drinking water of a community inhibit or abolish tooth decay. And now comes Dr. S. G. Harootian, chief dental officer of the Worcester, Mass., State Hospital, with the discovery that tooth decay is a deficiency disease.

Searching for an edible substance that

would supply the calcium, phosphorous and fluorides which inhibit caries, he hit upon the diet of the giant of Jack-the-Giant-Killer fame. Beef bones ground to flour and given in five-grain capsules three times daily to a test group of patients for a period of months proved one hundred percent efficacious in stopping tooth decay.

With the water commissioner to doctor up the water supply and tooth pills to take like vitamin tablets, who knows, there may be two teeth in every socket some day in the future—which beats the two-car-in-every-garage idea all to pieces. Or should we say, "all hollow"?

## ONCE IN A BLUE MOON

**T**HERE are usually twelve moons per year, and the ancient almanac makers gave each of them a name—Harvest Moon, Lenten Moon, etc.—but occasionally a thirteenth moon would show up, and this was usually called a Blue Moon. However, this is not the origin of the expression. As far back as 1500 there was argument on this subject. Is the moon ever blue?

In 1927, during a total eclipse of the sun, observers at Belfast, Ireland, reported that the moon took on a bluish tinge, while Dr. E. C. Brewer reports that such a phenomenon took place on December 10, 1883. Take your choice. Personally, we prefer green cheese—especially since cheddar is so scarce.

## PHOTOGRAPHIC COLOR MAGIC

**C**HARLES ARTHUR BIRCH-FIELD of New York City has invented an interesting little apparatus called the Iriscope. The principle of this adjunct to color photography, as old as color photography itself, is governed by the laws which govern the spectrum. Among other things Mr. Birch-Field does with his invention is this—any picture made at any time with a lens not corrected for color may be viewed in original color by proper use of the Iriscope.

According to Mr. Birch-Field, who insists that he is more artist than photographer, an uncorrected lens records a white point of light as a concentric spectrum on the film, the colors always being in the same sequence as in the rainbow.

Shorn of technical language, the Iriscope

reproduces each point properly, translating the black and white of the film back into the natural color before the camera when the photographer snapped the picture. Think of the fun of turning the Iriscope on the picture of great-grandpa in the family album and proving that his whiskers were not brown but fiery red!

## NATURE'S CRAZY HOUSE

**N**EAR Sardine Creek, between Crater Lake and Oregon Caves, in the southwestern corner of Oregon, stands a mine shack in a circular area of about 130 feet in diameter.



In this area the laws of physics grow cock-eyed. Plumb lines won't hang true, balls roll with increasing momentum in one certain direction, and it isn't downhill. Anything tossed into the air always falls away from the north. Trees on the property lean against the breeze, while visitors walk at a slanting angle without realizing it.

Don't ask us what the answer is. Some scientists claim it is only an optical illusion. However, a photographer made a light test and showed that the intensity of light within the circle measured 65 units while at the same time it measured 160 units outside the magic circle. The queer magnetic distortion is weakest at dawn and strongest at noon.

Maybe this is another sunspot, folks. Anyway, every visitor is strangely affected by the phenomena of the place.

## BUSY LITTLE MERCHANT

**I**T HAS been estimated—no doubt by a mathematician who had no income tax to figure at the time—that the progeny of one oyster, if unhampered for seven generations, would increase to a mass the size of the entire earth.

Fortunately, Nature has put innumerable controls and natural enemies on the industrious shellfish and prevents any such calamity. However, the oyster is an indefatigable worker, outrivalling the coral for industry.

For example, there is only six one-hundredths of an ounce of calcium in a gallon of sea water. Nevertheless, from this source alone, the oyster builds up its heavy shell

calcium and furnished the world's supply of pearl buttons from the nacre of its shell until plastics have nosed out this job.

## FORERUNNER OF ROCKET SHIP

**C**APTAIN FRANK WHITTLE, young English R.A.F. engineer, has developed the first really successful jet-propulsion airplane. While not a true rocket ship, this plane draws in air at the nose, mixes it with liquid fuel in a combustion chamber and fires it out through a central tube with opening at the rear.

There is no other method of propulsion to this plane. Without so much as a pinwheel propeller, the Whittle plane takes off a runway, achieves the tremendous speed of 600 miles per hour, maneuvers perfectly, flies to the stratosphere, and lands smoothly. Both the United States and Great Britain are building these planes for present war purposes.

Pack my overnight bag, Mama; I'm hopping off to Mars for the week-end!

## THE LARGEST AIRPLANE

**W**HO hasn't been hearing things about the Mars, the Navy's monster cargo-flying boat? This queen of the air has a wing span of 200 feet, engines that deliver 2,200 horsepower each, and weighs more than twice as much as a Flying Fortress.

It has a two-deck hull with the capacity of a fifteen-room house, can carry a cargo load of 35,000 pounds—has lifted a record load of nearly 150,000 pounds, including the 72,000-pound empty weight of the plane itself—and flies at a speed averaging more than 170 miles per hour. The engineer's panel of the ship looks like the instrument panel of a large broadcasting studio—a maze of switches, gauges, flashing lights and buttons. There are more than 70 dials alone. This is the forerunner of the gigantic flying ships of the future.

Going my way, buddy?

## WONDER METAL

**I**N TURN in these columns we have considered various metals, two of the most recent being aluminum and magnesium. Comes now a metal unheard of forty years ago—tantalum, worth today around sixty-five dollars per pound. What is so wonderful about this metal whose only use up to a few years ago was as filament for electric light bulbs?

For a long time surgeons have been seeking a sturdy metal which wouldn't react with the chemicals found in the human body. They needed it for patching up broken and shattered bodies. Tantalum fills this need. It is hard, it won't melt at less than five thousand degrees of temperature, and it resists attack

by all but very few chemicals. More than this, bone will actually grow to it and over it, as also will the softer tissues of the body.

Tantalum is used in surgery today in plate and foil and thread form, not to speak of nuts and bolts and wire. It is used to stitch nerve ends together among other things, and it has the final advantage of being clearly visible in X-ray photographs.

Doctor, will you please put a zipper on my next appendectomy?

## DWARFS AND GIANTS

**WE** COME now to the big and little lesson in Nature's workshop for the month. The blue-bottom whale is the largest animal which has ever lived on this earth, and it is still extant today. This warm-blooded mammal which lives in the sea and yet once lived on land and once before that in the sea frequently reaches a length of ninety feet and a weight of one hundred tons. The baby blue whale is about twenty-five feet long at birth, and about fifty feet long when it is weaned.

Descending the scale in mammalian size, we find that wild pigs are the largest mammals in New Guinea, while the Great Red kangaroo of the interior plains of Australia is the largest of the 129 forms of this species, frequently being over six feet tall.

At birth a baby kangaroo weighs only one three-thousandths of its mother's weight, whereas a human baby is about one-twentieth the weight of the mother.

And finally we descend to the smallest mammal. This is the Etruscan shrew, a mouse-

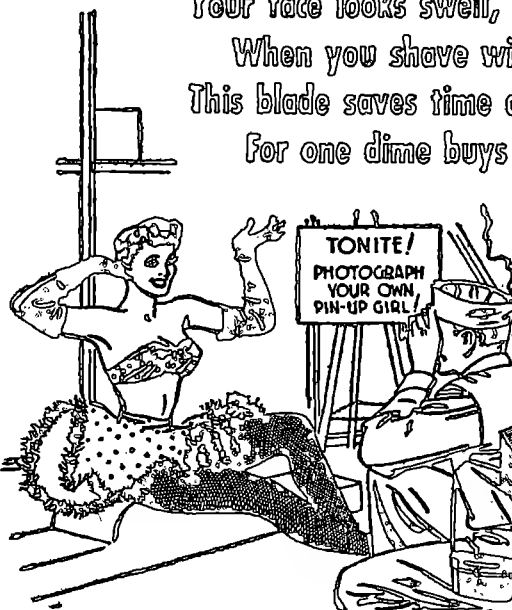


like creature with a highly sensitive nose that lives underground in Central Europe, Asia and Africa and weighs less than a silver dime.

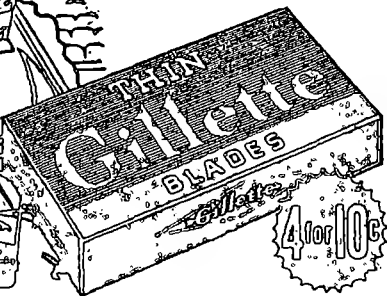
This tiny shrew is, for its size, a voracious eater, having to consume four times its weight per day in worms and insects to keep its metabolism going. Imagine a normal-sized man spending so much energy per day that he would need to eat four times his own weight, approximately six hundred pounds of food stuff! It's more fun to spend a dime for a hot dog, no?

*More SCIENTIFACTS Coming in the Next Issue!*

Your face looks swell, feels better yet  
When you shave with a Thin Gillette.  
This blade saves time and dough what's more—  
For one dime buys a pack of four!

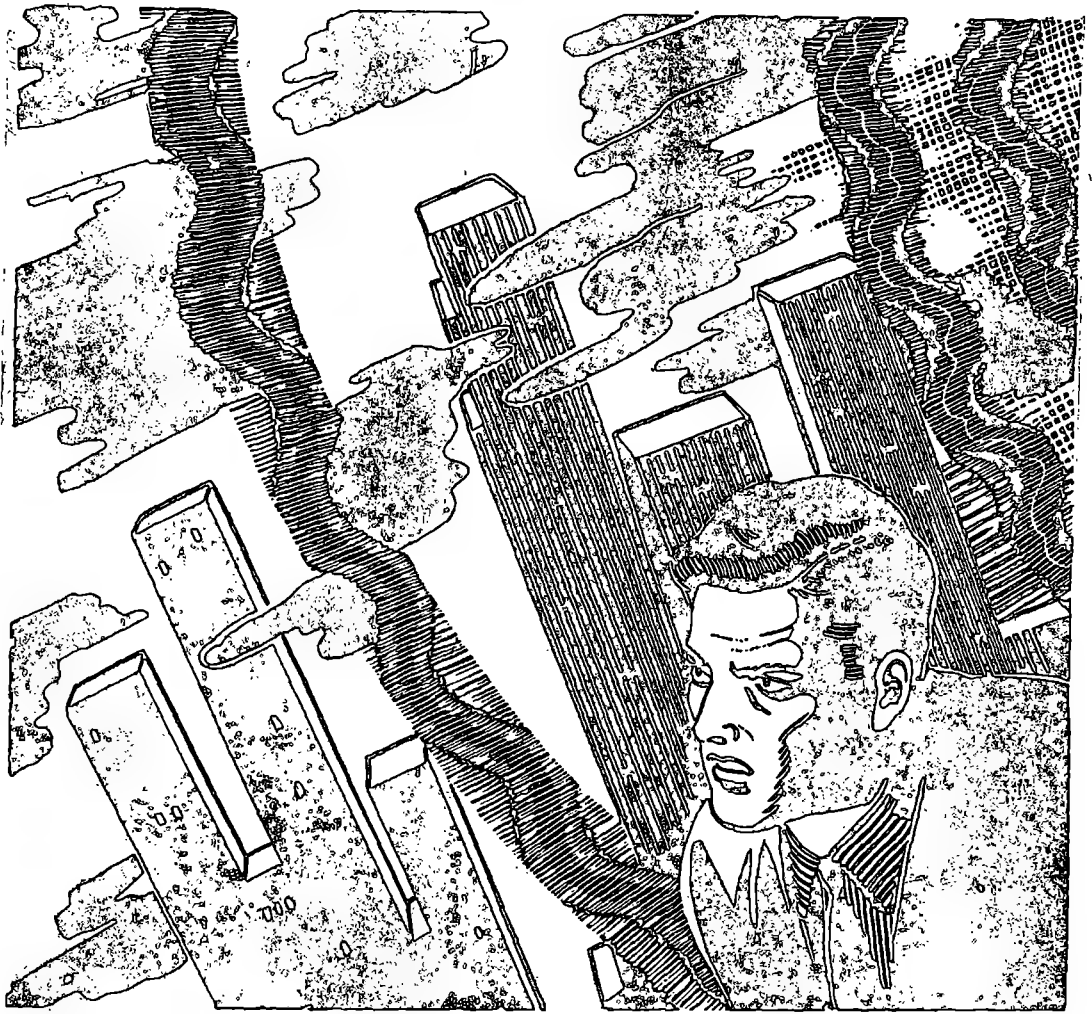


*Made of easy-folding steel  
hard enough to cut glass*



**Produced By The Maker Of The Famous Gillette Blue Blade**





They were completely

*An Amazing  
Novelet*

# THE LAST MAN

## CHAPTER I

### *The Jersey Charlatan*

**I**N NEARLY every newspaper office in the country, every once in a while, a reporter is assigned the rather dull job of covering a story about the end of the world. Now first off it sounds exciting, but it isn't. It consists of interviewing some crackpot who insists he has special inside information having to do with the whole world going down the drain on some odd Thursday.

New York reporters, in particular, kick at

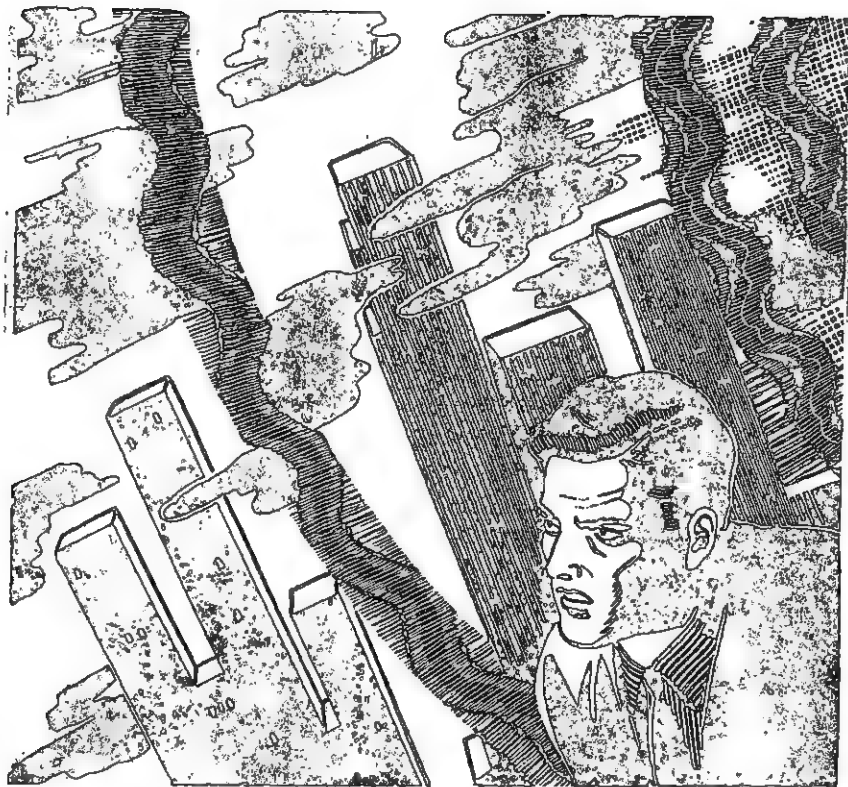
the assignment because it has one other serious drawback. Nine out of ten times the prophet to be interviewed has his home in some completely inaccessible spot, usually in New Jersey. On second thought, perhaps this is logical.

Joe Dunn, reporter on "The Telegram," was given such an assignment early one morning in October, 1954, and discovered, to his dismay, that the current prophet, who was named by the way, Fletcher B. Fletcher, was living at Berry Meadows, New Jersey. Joe Dunn was quick to point out—"a likely place for the end of the world."

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alone in a deserted world

# IN NEW YORK

By PAUL  
MacNAMARA

As a matter of fact, it was a natural assignment for Joe. He could give an amusing twist to small stories—he even made weather reports good reading. Therefore, a small "end of the world" story would be his meat. The boss also assigned a photographer—a gal—to go with him.

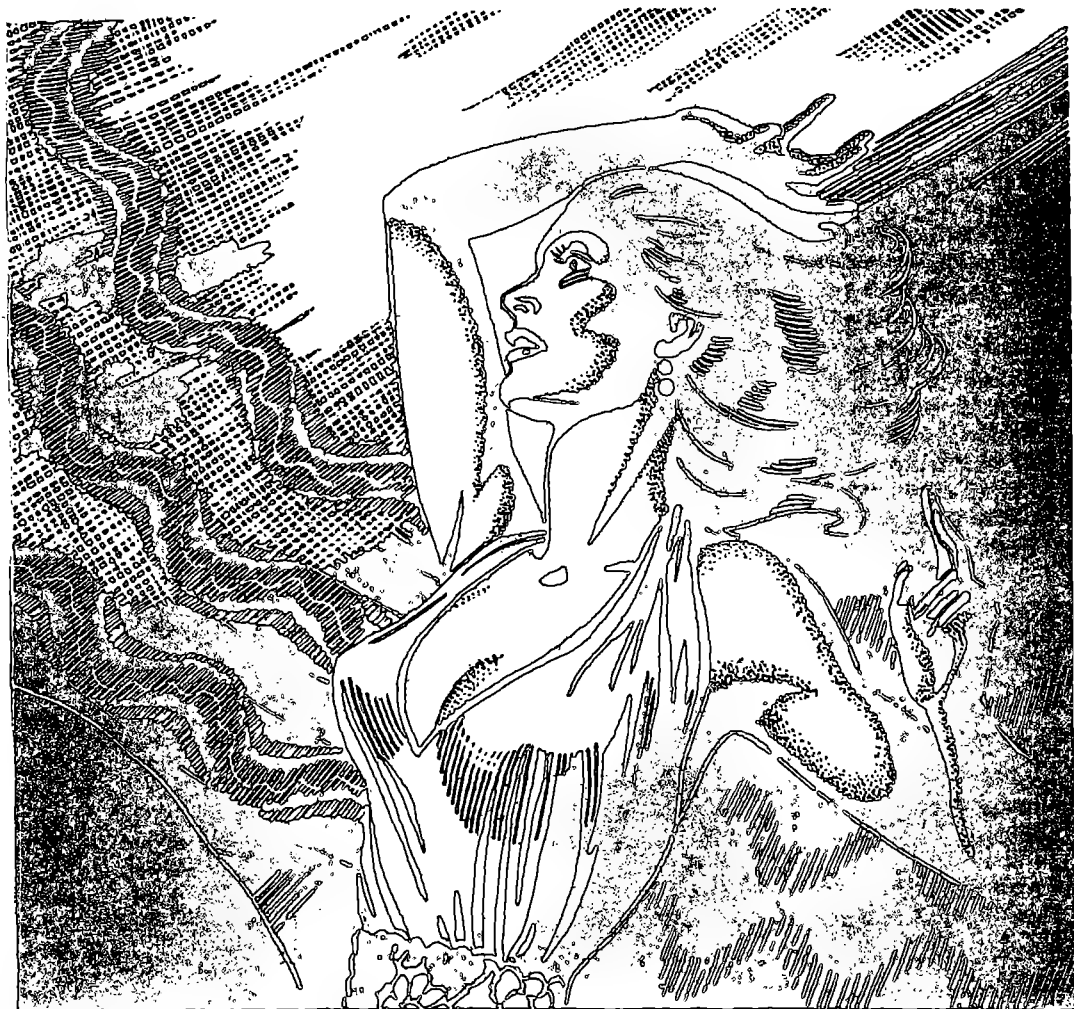
Her name was Julie Crosby. She also owned a car. She hoped she was kind of a Margaret Bourke-White. She was younger and really quite pretty—if you bothered to take a second look. She wore glasses which somehow fooled folks into thinking she was rather plain. Her legs, though, were mod-

eled along the true Dietrich lines—and they more than counteracted the effect of the glasses. She had graduated from Bennington a couple of years ago, and was bound and determined she was going to be a successful news photographer.

She took her job very seriously, and as a result, got a terrific kidding from the boys. She had a mind like a heckler out of the Club 18, so the kidding didn't bother her in the least. And everybody agreed she was very fast on her conversational feet.

Joe Dunn's feeling was that she wouldn't be bad looking if she didn't wear the glasses

in a Vast City of Silence and Death!



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—and didn't take her work so much to heart, and gave up those sensible flat-heeled shoes, and combed her hair in some other way, and was a little less on the wise side. Then, as a matter of fact she might be all right.

"Might be," he always said. Joe Dunn was also completely conscious of why the boss had assigned her to go with him—it was because she owned a car, and it would save the expense account. But so far as the story was concerned, it would never rate a picture.

**JULIE** secretly liked Dunn, although she never gave him anything but the back of her hand. She was a firm believer in the Rockne theory that a good offense is the best defense.

As they emerged from the Holland Tunnel on the New Jersey side, Dunn bent toward Julie.

"Have you any ideas about Jersey at all?" he asked her.

"Yes, I have, but I don't think I know you well enough to go into that."

There was more discussion as they drove along, about the best route to take. Joe Dunn suggested they stop and ask a cop. Julie refused, insisting she knew the way. Furthermore, she offered to bet they would "hit Berry Meadows on the nose." Joe took a dollar out of his pocket. "A buck you have to ask before you get to Berry Meadows, or, and it's now ten-twenty, you don't get there before one o'clock."

Julie, without taking her eyes off the road, took her right hand off the wheel, grabbed Joe's hand.

"It's a bet," she told him.

Some time later, as they came to an intersection and Julie slowed up, a sign read:

**BERRY MEADOWS  
2 MILES**

Joe, without a word, stuffed a bill in her pocket. Julie smiled.

"That'll teach you to play cards with strangers on trains."

Just ahead was the Reverend Fletcher B. Fletcher's establishment, a dilapidated old school house, its only ecclesiastical note a neat plastic sign swinging over the gate arch which admonished the observer to "Trust In The Universe Master."

"That," observed Joe, "is a new one. I take it this is not a conventional religious cult. By the way, how did you happen to know about this location?"

The girl wrinkled her brow thoughtfully. "I just knew where Berry Meadows was," she answered. "I don't know anything about Fletcher and this Universe business. Let's go in and see."

She turned the car in at the driveway, and a photo-selenium cell opened the gate for them.

"Uummm—up to date attachments, anyway," observed Joe. "This is beginning to interest me slightly."

Julie parked the car without answering, and they climbed the steps to the rickety porch in silence. As they approached the weatherbeaten door the barrier swung noiselessly open for them.

"More electric eye stuff, eh?" muttered Joe. "Darned if I like this much."

The girl shivered slightly but did not speak. She fumbled with her photographic paraphernalia.

"Enter, please," a deep, sonorous voice bade them.

Startled, the pair did so hesitantly, peering about for the owner of that resonant voice. And seeing nobody. Then they forgot the voice in the wonder of their surroundings.

As they crossed the threshold, the door swung silently back into place behind them. But instead of the interior of a rotting country school house, they found themselves in a huge room which gave an impression of greater size and vagueness. This was because there was no perceptible border to the area. No wall or ceiling was distinct. There was a hazy shimmering effect around the edges of the central space, and a soft fluorescent glow of light—coming from no recognizable point—filled the space with bluish-white luminence.

After they left the place the two newspaper representatives had an impression that there had been a thick and resilient carpet on the floor, a big desk and some chairs scattered around, and the feel that there was efficient office machinery and equipment somewhere in the unseen background—but they could recall no details. Not even of the color and design of the visible furniture. It was queer.

But they had little time now to consider such matters. From beside the huge desk a man was approaching them. And what a man! He must have been six and one-half feet tall, with broad shoulders and athletic bearing. His age might have been anywhere from thirty to fifty. All they could remember about him was his iron-gray hair, brushed in pompadour fashion, and his keen and flashing black eyes. He must have been

conventionally clad, because they could later recall no outstanding eccentricity of dress.

"Welcome to the Master's way-station," he greeted. "You wished to see me?"

Julie reached for her flash bulbs, but Joe grabbed her arm.

"Not yet," he murmured. "Let me talk to the old boy first." Then: "Yes. That is, if you are Reverend Fletcher B. Fletcher."

"I am," admitted their host, "although the title 'Reverend' is really a misnomer. It simply approximates the Earthly conception of my duties and office. I am actually the representative of the Universe Master."

**D**UNN could not repress a smile. "All of which sounds like the double talk of the last decade," he said frankly. "I don't understand it. In fact, there's a lot of strange stuff I don't understand." And he indicated the queerly lighted room, with a gesture of his arm.

"But that," said Reverend Fletcher, "is not why you have come to see me. You are—?"

Joe Dunn introduced himself and Julie as reporters from "The New York Telegram."

"We have come out here to interview you," he concluded. "We understand that you have prophesied the end of the world, and we'd like a story on it. Also a picture," Joe added as an after-thought, while Julie glared at him.

"My poor friends," said Mr. Fletcher, "there will be no papers, radio, or telecasts tomorrow. Nothing tomorrow—nothing at all. Tonight is the last night on Earth for all humanity. It is the end of this project."

This was typical mumbo-jumbo stuff, and Joe Dunn shifted quickly into character. "Ah, but Reverend Fletcher! This is for today's paper—the final editions. I'll telephone the story in from the nearest town."

Reverend Fletcher looked at him pityingly. Then he shrugged faintly. "Very well. I suppose it is quite natural to carry on until the final gasp. Probably will prevent panic. I was sent here as the special envoy of the Universe Master to settle this account and select, if possible, a few deputy agents for field work in other departments. How your newspaper heard of the business was an accident which could be explained several ways. But to get to the point. On the eighth day of October, this year of Nineteen Hundred and Fifty-four, Earth time, the books will be closed. Promptly at twelve o'clock, midnight: That is all."

"Who is this—this Universe Master?"

asked Julie. "Do you mean God?"

"That, my dear child, you wouldn't understand," replied Reverend Fletcher. "There is no time to instruct your minds on the subject now."

"But that's no story," objected Joe Dunn. "Tell me more about yourself. Where did you come from? How long have you been in New Jersey? Where did you get this information? How do you arrive at your rather drastic conclusions? What—the eighth of October! That's tonight!"

"Quite true," agreed Reverend Fletcher. "Definitely. I regret that I can offer you no refreshment, but this is a very busy day for me, as you might infer."

"Space-dizzy!" said Joe Dunn under his breath. Which reminded him of something. "But the world can't come to an end now. We are on the verge of spatial travel. The Cravenaugh development of the rocket principle has barely started."

"There will be no space travel from Earth," interrupted Reverend Fletcher firmly. "There will be—nothing."

For one of the few times in his life, Joe Dunn felt at a loss how to proceed. This was one of the screwiest interviews he had ever tried to get. It was like punching at the empty air. He simply couldn't come to grips with a crackpot like this. Julie was more practical.

"Reverend Fletcher," the girl asked suddenly, "please, could I take a picture?"

"Certainly, my child, if you care to," replied Fletcher amiably. And he assumed a slight pose.

This was more like it, reflected Joe Dunn a bit cynically. It took a woman and some personal publicity to soften some of these I.Q. erratics up.

The flash bulb lighted up the immediate area. Reverend Fletcher got into the mood of things quickly. He posed obligingly as Julie directed, and the girl shot half a dozen good pictures.

"I doubt if the pictures will do you any good," said Fletcher at length. "Certainly, they will serve you no purpose. And now, if you will excuse me, I have a host of details which must be attended to."

Joe took the hint. He was ready to leave, anyway. "Let's go—er—Julie," he said. "You've got enough pictures. If I stay here I'll be believing this stuff myself."

Reverend Fletcher favored him with a slight smile. "You know, it's just possible that you might do as a special deputy," he said slowly. Then, "But we will see about



that later, Mr. Dunn. I must bid you good afternoon. We may meet later—if the Universe Master so wills."

"Where will you be later, Reverend Fletcher?" Joe asked curiously. "Where will you be tonight? Here?"

"No, my son, I will be at the exact point in the world where Latitude forty degrees, forty-seven minutes North crosses longitude seventy-three degrees, fifty-nine minutes West."

Joe wrote it down in his notebook which had so little else. Then he realized suddenly just what he had taken down.

"I beg your pardon, but where would that be?" he asked.

"Young man, every intelligent person should know the heavens," said Reverend Fletcher with his first show of impatience. "Good day, and may the Universe Master be with you."

With a wave of his hand he dismissed them, and they found themselves walking out into a normal world once more. As they stepped off the rickety porch into ordinary sunlight it was difficult to believe they had come out of a place of such queer light and confines which somehow defied the accepted laws of plane and solid geometry.

"What are you doing?" demanded Julie as Joe Dunn turned and craned his neck to survey the outlines of the old school house.

**T**HE reporter's face had a baffled expression. "I don't see how Fletcher achieved such an atmosphere of large space inside that building," he said. "It's only a one-story house."

"Don't let that worry you. You should know of the latest advancements in the use of light. Or don't you read the scientific journals? Get in and let's be going."

Joe complied. As Julie started the car and drove out onto the county road, he was still grumbling.

"I think that guy was kidding me—giving directions on a longitude and latitude basis. Who does he think I am? Captain Future?"

Julie's answer was quick. "He might. He spoke of possibly making you one of the Futuremen. Shall I stop at the next town and let you telephone in the story?"

Joe snorted. "And make the City Editor froth at the mouth? That was just rocket gas I was feeding Fletcher to get him to talk. And that's all I got out of him. Rocket gas!"

Driving back to New York, Joe Dunn speculated on how people get that way.

"Imagine predicting the end of the world!" The more Joe thought about it the more burned up he was about people like the Right Reverend Fletcher. "Upset a lot of people, work them into a frenzy, and then, it never comes off."

Joe wondered what people do and say after making a prediction of that kind, when nothing happens. What do they do, all sit around looking at their watches until midnight, and then put their fingers in their ears and shut their eyes. At five minutes after twelve, would they start to heckle the Reverend? What can he say? What explanation could he give?

"It certainly must wash him up in his racket," Joe decided. "I'd like to have a look at that old faker at say five minutes after twelve, at latitude whatever it was!"

Julie gave him an idea. If he wanted to see the Reverend with his face red, why not find out where latitude whatever-it-was did cross longitude so-and-so? The more they talked about this, the better the idea seemed. The picture of Mr. Fletcher holding the bag might even make a column in the paper. When he mentioned his idea he learned Julie wasn't so stupid. Julie, with a practical follow-through, pulled in to a road-side stand and told Joe to call the office and get some one to give him the spot the Reverend Fletcher had indicated so quaintly.

Joe's conversation with his boss was not without incident. At first the City Editor thought Joe Dunn was drunk, and when he was finally convinced Joe wasn't, he agreed to call him back.

In ten minutes Joe got the call from the Ship's Editor who had run down the information as to where Longitude 73°59' West crossed Latitude 40°47' North.

"It's approximately a spot between Fifth and Sixth Avenues, between Forty-ninth and Fiftieth Streets."

During the drive into New York they speculated on the Radio City angle. Could it be a promotion stunt? Where would the exact spot be? It might mean the Skating Rink, or it might mean the Rainbow Room. The only thing to do when they got in town was to go there and have a look around for a likely spot. "At the top" they agreed would be the most logical place.

Joe arranged to meet Julie at seven-thirty at Louis', a little restaurant in the Village where Joe could cash checks. It was late in the afternoon, and Julie dropped Joe off near a subway station to a nearby studio to develop her films, and then went on home.

She wanted to change her clothes, too.

Joe continued on down to the office and wrote his story.

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## CHAPTER II

### *City of Frozen Time*

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JOE DUNN got to Louis' early. By the time Julie had arrived he had choked down two old-fashioned. Julie came up behind him at the bar. At first Joe Dunn didn't notice her. She was wearing a good-looking black dress. For a second in the mirror Joe had a flash impression that somehow she looked smarter.

As he turned, Julie was putting on her glasses. Joe gulped and turned back to the bar. "Well?" he said, with a rising inflection.

Julie smiled behind his back and climbed up on the next stool.

"What's the idea of the delayed take?"

"I didn't know you without your glasses."

Julie replied, with slight annoyance that people refused to take her seriously without them. Joe shook his head without comment, but his eyes were eloquent. Then Julie said something which changed his mood.

"Joe, listen—the strangest thing! I developed those shots I made of Reverend Fletcher. And every one of them came out blank. There wasn't a thing on a single film! Nothing!"

Joe almost choked on his third drink. His shoulders began to shake, and then he was laughing out loud.

"It's not funny!" she said furiously, her eyes flashing. "I suppose you wrote your old story, and I fell down on the pix assignment."

"I wasn't laughing about that. I was laughing at the dumb stunt of a usually smart photog. You simply forgot to take the cover off your lens."

"Idiot!" she snapped. "I did not. I didn't have a lens cover with me. I shot eight perfect pictures. And I got eight perfect blanks. There wasn't even any background detail. It was just like unexposed film. I tell you it's crazy!"

Joe had his own opinion on the matter, but he prudently dropped the subject. "I'm sorry," he said contritely. "There has to be some explanation, of course. But let's have dinner now."

Dinner proved to be fun. Julie recovered

from her worried, angry mood, and they began speculating on just what would happen if the world somehow did come to an end.

Julie had an interesting contribution on what would happen. It was based, she said, on some inside information she had been able to get from Sherman Billingsley.

"Suddenly, the whole world will be overrun with storks, temporarily, of course. The storks that brought us will come and take us away. It's all very simple."

They discovered it was eleven o'clock, so they left the restaurant and walked over to Fifth Avenue and took a bus uptown. They went into the R.C.A. Building of Radio City and took an elevator up to the observation platform. There was a small bar, and only a few people in the room, so they felt as if they almost had it all to themselves. The night had clouded over, and it was warm and a little sultry for late October.

Perched on stools at the bar, they ordered a highball and kept looking around the room for Mr. Fletcher, who as yet had not shown up. Julie walked out to the parapet and came back to report.

"There's some lightning off towards New Jersey."

Joe looked at his watch. It was eleven-forty-five. Still no Mr. Fletcher. It was beginning to rain, and one of the waiters had shut the door that led out on to the parapet.

By this time there was a first-rate electrical storm crackling over the city. Julie was standing looking out at the storm through the glass doors.

"Looks like we've drawn a blank, like your pictures," said Joe Dunn. "Shall we go out and have a last look at New York?"

Julie sniffed at the allusion but pushed through the swing door. Joe grinned and followed. They walked out on the parapet into a rising wind that promised to blow into a small gale. There was a splattering of rain. The walkway was quite wet and slick.

New York lay spread out below them, a fairy city of lights and graceful towers. Central Park was a postage stamp to the north, and Times Square seemed right below them on the left. They made their way against the wind around the parapet. It was one minute of twelve, and New York was wide awake, beautiful—and throbbing with life.

"This is getting us nowhere, Julie, and we're getting wet," Dunn said finally. "It's dangerous to stay out here in the wind. Let's go back inside."

SHIVERING slightly, the girl took his arm. As they leaned back against the wind to head for the door there was a vivid flash of lightning, a sudden shift of the wind, and a stinging patter of icy raindrops. The parapet simply slipped out from beneath their feet like soaped glass, and they crashed flat on their backs, their heads cracking against the flooring of the balcony.

Instantly things went black for Joe Dunn. He didn't even know he had been knocked unconscious. . . .

When Joe Dunn came to, which didn't seem to be anytime at all, he lay still for a moment to orient himself. Then he remembered, and he felt quickly for Julie. She wasn't there beside him. He tried to get up, but the wind was too strong and he was still woozy from his fall.

His hat was gone, too. But the clouds were opening up to show a bright moon. The worst of the storm seemed to have passed. Joe finally got to one knee, and with one hand on the parapet rail, stood up. There was not a living soul in sight around him. He seemed to be utterly alone atop the R.C.A. Building. But Julie couldn't have been blown overboard.

Grimly he started for the door, working his way slowly along until he was opposite it, using all his strength and weight against the whistling wind. Suddenly the wind stopped—dead. Just like that. He was like someone pushing against a door when someone on the other side suddenly opens it. He nearly fell on his face.

He caught his breath for the first time and stood fully erect. The sky was sharply clear. It was a beautiful moonlight night. Even the few clouds had ceased to move. They were frozen against a star-studded firmament.

Joe Dunn looked at his wrist watch and discovered it had stopped. The hands pointed exactly to twelve o'clock. That would have been about the instant he had fallen. So now he had a five-dollar repair job at the jewelers to charge up to this Fletcher business.

Rubbing the bump on the back of his head, he walked slowly to the east side railing and stared down at Fifth Avenue. There it was—New York complete. But no, there was something different. Surely he was dreaming. There was something strange about it. There were no lights, no sounds, no—no motion.

Then he got it. That smack on his head had somehow unnerved him and deadened

his senses. Everything just seemed dark and still.

Joe grabbed the railing with both hands and looked down again. That was it—there was no sound of cabs—no traffic sounds at all. It was quiet, and completely dark except for the light of the moon. It was beautiful, but it was too still.

He walked around to the southern edge of the platform where he could look south and west, and noticed the clock on the Paramount Building had also stopped. It looked to be about twelve o'clock—same time his own watch had stopped.

"My gosh, did everything stop at twelve o'clock?"

He went shakily into the bar. The moon gave a little light, filling the place with funny shadows. He lighted a match and tried to find a switch. It was over by a door which apparently led into a kitchen. Of course, it didn't work. Joe knew it wouldn't. It brought on his first touch of panic.

"Hey, Julie!" he yelled. The sound echoed around the room and he felt a shiver up and down his spine. His head ached like the devil. He rushed back to the door leading out to the platform and looked up and down for Julie. There was no sign of her. There was no sign of anybody.

He struck another match and walked around in back of the bar, grabbed a bottle and poured himself a big drink. It made him feel better, and he went out to look again.

The Waldorf-Astoria showed up clear and bright and silvery in the moonlight, but there were no lights in any of the rooms. To the south he could see the outline of buildings down at the Battery. That's it, he thought, blacked out, like in war times a decade previous.

Joe Dunn now knew he was up against something abnormal. Maybe that smack on his head when he fell had done something to him. Maybe he was crazy. Suddenly panic struck him, and he rushed through the door toward the elevator and pressed the button. But everything was dead. He hurried back and tried to open the door leading to the stairs. It was stuck. Joe shoved, and it gave. He went down a whole flight, then stopped, came back up to the bar and grabbed the bottle of Scotch. He looked around once more and then started down the stairs.

It was as black as a pocket—there were no windows. He began to get the rhythm—twenty-eight steps, turn—three steps—twenty-eight steps, turn—three steps—twenty-eight steps, turn . . . He began to count the

floors. Finally, at about the fiftieth he ran into trouble with a door that was stuck. This took a great deal of time. Joe's shirt was soaked through, his head pounded, and he was scared!

WHAT seemed like hours later, exhausted, he walked into the lobby. Sun shone through the windows, and he walked into the street.

Broad daylight! It must have been later than he thought when he started down, or else it had taken him longer than he thought. He crossed the street and walked over and looked down at the skating rink. There were no skaters. There were a couple of cars parked over by the American Airlines office, and he walked over toward Forty-ninth Street and then east toward Fifth Avenue.

Standing in the middle of Fifth Avenue at Forty-ninth Street, for the first time he noticed that there was quite a grade down to Forty-second Street.

The sun was hot. It must have been around eleven o'clock. He took off his coat and started to walk slowly uptown, along the white line that divided Fifth Avenue in the middle.

As Joe walked along he wondered. "Where did everybody go? Maybe this is the end of the world. Maybe that guy over in Berry Meadows was right."

Joe, for the moment, couldn't remember his name.

He looked at the statue of Atlas opposite the Cathedral. He was a little surprised that Atlas hadn't set the world down to stretch his arms.

"He'll never have a better chance," muttered Joe.

At Fifty-second Street he turned east. At Madison he felt for cigarettes, turned and walked into a drugstore, and took two packages of a popular brand.

He noticed again the stillness, the bright sunshine, the cloudless sky, the lack of human beings. But not a breath of air stirred. Joe walked across Park, east past Lexington, under the Elevated, across Second Avenue and down the block to his house.

He got out his key and discovered the downstairs door was open. He noticed a wrong-side-out umbrella on the fire escape on the first floor. He ran up the stairs to his fourth floor apartment.

Bill Nolan, the chap he lived with, had shut the window, but the rain had seeped in somehow and soaked the floor in front of the window. Bill, of course, had gone. Joe looked

around for a note—in the typewriter—on the mantle over the fire-place. He looked at himself in the mirror.

Somehow it gave him a start. For a moment Joe had the funny feeling that he didn't look as he had always believed he did. That bang on the head had certainly knocked him lopsided. He turned his head in an effort to inspect the bump in the mirror. It was right over his right ear and he touched it gingerly. A good bump, but no blood. Joe rubbed his chin. He needed a shave.

He went out and opened the icebox. The light didn't go on. He got out a bottle of milk and started to pour some, but discovered immediately that it was sour, very sour.

"That's funny," thought Joe. "It shouldn't be sour."

He looked at the date on the cap. "Bottled Wednesday, October 8th," it said.

"That was yesterday," muttered Joe. An odd expression came over Joe's face. He wondered if it was only yesterday. "I couldn't be a Twentieth-Century Rip Van Winkle. No, I'd be hungrier."

A can of beer was okay. Some crackers that were kind of soggy gave Joe some sustenance. He put down the beer glass and walked out of the apartment. By the time he got to the second floor he was going down three steps at a time. Joe Dunn was scared again—good and scared!

Joe slowly walked over toward the river where he sat down on a bench in a little park which was actually the end of the street right at the river's edge. He was beginning to realize that apparently he was the last person in New York—maybe the last man in the whole world, and through some fault in the Universe Master's bookkeeping he had been overlooked.

"What does a fellow do who is the last man in New York. Where does he live? What does he do and whom does he see? I can live anywhere. There are hundreds of apartments and hotels. I can live in a different one every day, so far as that goes. There's probably enough canned goods in New York to keep me going for a thousand years. That's a nice idea—a thousand years all alone!"

He had to find somebody else—somebody to talk to—Joe Dunn was lonesome!

He lighted another cigarette and walked over to the railing and started to flip the match into the East River, then stared.

There were no whirlpools, no rushing water. The East River was stagnant, just dirty, still water. Already pieces of wood that floated above the water were drying in the

sun. There was something strange about the sun, now that he looked at it. The sun didn't appear to have changed its position since early morning. It was in the same spot it had occupied at forenoon.

"This must be my imagination," muttered Joe.

He took out a handkerchief, wiped his forehead and walked rapidly away.

### CHAPTER III

#### *Desert of Loneliness*

**A**FTER a while, Joe Dunn decided to go down to his office and see what happened down there. It took him two hours, and by the time he got to South Street the curbstones seemed to be two feet high, he was that tired. When he sat down at his desk his shirt was wet. In the top drawer was a little notebook with telephone numbers.

He took out a folding checkbook, looked at the balance which was two-hundred sixty-six dollars, but noticed there were two stubs which he neglected to fill out. He stuck the checkbook in his pocket and walked down the hall to the publisher's office.

He had never been in this inner sanctum, and it looked pretty much the way he imagined it would. It was paneled. There was a big leather over-stuffed chair in which, as you swiveled around, you could look out over the East River. There was a freighter tied up at the Pier, right across the street, silent, deserted—motionless.

Joe walked back to his own desk, rummaged around in the bottom drawer and found an old pipe he had forgotten about. He walked over to Julie's desk and opened the top drawer. There was a small broken mirror, a ten-cent tube of cold cream, a U. S. Camera book dated nineteen forty-nine, some miscellaneous papers and one of those plastic hair curlers which was clipped around some bills. The top one was from Bloomingdale's. Joe took down her address. It was Twenty-two Grove Street.

On his way out of the building he went down into the basement where the presses were. The room was still and dark and damp. The presses looked big and black and oily. He went over to where the papers feed out, and climbed upon the roller to see what edition had been running when they stopped. It was the City Edition. As

he leaned over sideways to look at the headline, which was in twenty-four-point type, he read:

**ELECTRICAL STORM PARALYZES CITY**  
All Communications To New York  
Go Dead As Odd Disturbance  
Moves In From Southeast

As Dunn started to climb down he noticed a little story in the lower left hand corner of Page One. It looked strangely familiar. He started to read it.

It had a Berry Meadows, New Jersey, October 8th, dateline. The story was intended to be an amusing account of the goings-on of a Fletcher B. Fletcher, an odd Evangelist who predicted the end of the world Wednesday night at twelve o'clock.

It concluded: "However, up until a late hour tonight everything was going on in customary fashion throughout the world, in spite of Mr. Fletcher. Taxes are too high, helicopters are still too expensive and synthetic foods still lack natural flavor. Apparently Fletcher has been too busy ending the world to attend to minor details."

Joe read it again and climbed down off the roller. He brushed himself off.

"Very funny," he muttered, and left the office. The sun was still bright. "By Jupiter!" he marveled. "The rivers are stagnant, the sun doesn't move."

Joe began walking back uptown along Fourth Avenue. Through Grand Central and on up Park to the Waldorf. He went in through the Park Avenue entrance and up the broad steps and into the main lobby. Complete exhaustion had finally caught up with him. He looked around one of the lower floors and found a room that was open, and there prepared to spend the night.

It was a comfortable room, with a double four-poster bed. A "Do Not Disturb" sign hung on the doorknob. Before he got into bed, with a pencil he marked out the word "not," so the sign read "Do Disturb," and hung it outside of his door. He was tired, but the strange daylight kept him awake. Finally he got up and pulled down all the shades.

**W**HEN he awoke in the morning he got a start before he remembered where he was. He needed some shaving equipment as he now had a two-day's beard. He could also do with a clean shirt.

On his way downstairs he decided he might as well get a suite. There must have been at least 1200 rooms in this hotel, and

no need of his having only one room.

"Gosh, I can have a floor if I want it," said Dunn.

In the big kitchens he collected a five-gallon jug of Bear Spring Water, a chafing dish, some canned goods, knives and forks, and took them up to a two-room suite on the third floor.

Later that day he began systematically to explore this strange New York without people. It needed strenuous leg work, and the next day Joe stayed in bed until late. He wasn't sure what time it was, because of the odd breakdown in mechanics. His watch didn't appear to be broken, but it wouldn't run. He wound it, but it didn't tick, and the hands wouldn't move. He smoked a couple of cigarettes and thought about things.

Later, when he did get up, he decided to walk across town. As he passed Abercrombie and Fitch's window he decided he ought to have a gun—why, he had no idea. He wasn't even sure that a gun would work. He was sure there was some kind of a general mechanical mixup. His watch wouldn't work, and a taxicab, with the key in the switch never moved a gear tooth when he stepped on the starter. For some reason wheels just wouldn't go around. He borrowed a monkey wrench from the car and smashed the door glass of the store. The crash seemed loud but was quickly stifled in the aching silence.

Entering, Joe walked through the archery department of Abercrombie's looking for the gun counter. On his way, he took down a bow and solemnly aimed an arrow at a clothes dummy which was standing near the doorway in a hunting costume. He missed the dummy, and the arrow shot through the shattered door into Madison Avenue and clattered across the street to stop against the opposite curb. Gloomily, he went on and found a gun he liked. It was a thirty-eight Colt automatic.

Late that afternoon, back in his room, he put the gun and the box of shells on the dresser. He never did try to fire it. As a matter of fact, he never carried it again. He didn't want to find out that it wouldn't work.

A couple of days passed. With his exploring Joe had pretty well covered the midtown section of Manhattan. He went into apartment houses along Park Avenue, and shops on the Avenue, breaking his way in whenever necessary, and never once setting off a burglar alarm. One day he stopped in the University Club and sat in an overstuffed chair, looking out over Fifth Avenue, and pretending. But it was no fun alone. Noth-

ing was. He wanted to talk to somebody beside himself. His voice seemed to have a funny sound in his ears.

He began to lose track of time, of course, in this city of changelessness with the sun frozen in one spot in the morning sky. But the equivalent of a week must have gone by, during which time he had walked across Queens Bridge to Long Island City, had gone aboard one of the big ships tied up in the North River, and otherwise sought occupation as well as an answer to this ghastly enigma.

That the end of the world had come was ridiculous. For here the world was, and he with it. But something had happened to people and animals and insects—and time! Time? Time hadn't been completely frozen, or else there had been a slip of cogs in the machinery of the Universe Master. For it had changed from night to midmorning while Joe had descended from the R.C.A. tower.

Which reminded Joe of something. He hadn't been back to the top of the R.C.A. Building. There might be something he had missed or overlooked up on the balcony. Maybe Julie was still there. She had been with him at the moment he fell. She had fallen, too. Where the devil was Julie? Why wasn't she trapped in this terrible nightmare with him?

It took more than three hours to climb to the top of Radio City's tallest building. Many times Joe had to stop and rest. When he finally walked out on to the parapet he was exhausted and trembling. He had to sit down on a bench and get his wind back before he felt up to doing any exploring.

For a long time he sat there, glancing now and then up at the sun. It hung like a picture. He reached out his foot and placed the toe of his shoe on the exact edge of the shadow. He waited for an interminable period, but the shadow never moved. This only told him what he already knew. The world was dead and time had simply ceased to exist. Only Joe Dunn was still alive.

RESTLESSLY he got up and walked around the parapet, looking over the city for some sign of life, of smoke—even a moving cloud in the sky. There was nothing.

Returning inside, he walked in back of the bar, picked out a fresh bottle of Scotch, turned to put it on the bar—and nearly dropped in his tracks. There, standing in the middle of the bar was another bottle. Someone had pulled the heavy lead foil off

the top, and apparently had taken one drink out of it.

Joe, without taking his eyes off the bottle, walked slowly around the bar, carrying his bottle of Scotch by the neck, and climbed up on a stool. He continued to stare at the bottle on the bar. It was a brandy bottle. While Joe looked at it, he automatically opened his bottle of Scotch and poured himself a drink. Someone had opened a bottle of brandy after he had left. He was sure there had been no bottle on the bar when he had come in off the platform that night.

Maybe it was Julie! Maybe Julie had been out there on that platform after all. Maybe he hadn't walked all the way around. Maybe he just thought he had. Joe poured himself another drink, and for the first time since the storm, he felt right. There was somebody else in town. Now all he had to do was find that somebody.

Joe carefully examined everything in the room, went slowly around every foot of the parapet, but there wasn't any other sign or clue. There was nothing more to do up there. He'd better start to find out who it was.

Before long he was using the old rhythm—twenty-eight steps down, turn, three steps, and so on. Only this time he was going faster.

Joe Dunn was out to find another human being!

## CHAPTER IV

### *Message in Soap*

**S**UDDENLY, on the count of twenty-six Joe stepped on something that turned under him. He grabbed for the railing, missed and fell the last two steps to land on his hands and knees. He got up, gingerly rubbed his knees and thought about what might have happened.

"A fine time for a broken leg!" he growled.

Lighting a match to see what had thrown him, he got a surprise. There on the bottom step was a heel off a gal's slipper. "By glory, somebody else is living here in New York—and it's a dame! A girl who has a heel off her slipper."

Joe put the heel in his pocket and proceeded more carefully down the rest of the way, and out on the street.

Standing in front of the building in the bright sunshine, Joe examined the heel care-

fully. "It must be Julie's, yet this can't be off Julie's shoe because she always wears those tug-boat type. Perhaps she's changed her style, but I can't be sure. Maybe she did have this kind of shoe on that night. She went home after it happened. Twenty-two Grove Street."

Grimly Joe Dunn started walking downtown toward Grove Street with the heel of the slipper in his hand.

"Maybe that bottle of brandy was on the bar the night I took the bottle of Scotch," thought Joe. "No, I'm sure it wasn't. Anyway, what about the heel? Maybe it wasn't Julie's. Maybe it was some other gal's. Anyway, it was somebody's."

If it wasn't Julie's whose was it? Dunn began to wonder what she might look like. He studied the heel to try and get some idea. It wasn't scuffed and it wasn't run over. It looked as if it came off a good shoe, a slim, narrow shoe. There was still the mark of a little sticker that had been pasted on the inside. Someone had carefully pulled it off with a long, manicured nail, Joe hoped.

So far as that went, Julie had long, well-shaped nails. Joe was walking faster. As a matter of fact, Julie wasn't bad looking. Nope, as a matter of fact, Julie was quite attractive. Yes, indeed!

Twenty-two Grove Street was a made-over brownstone. Inside the door was a brass mailbox, with the names of the tenants alongside little black push buttons. Kraft, Michaelson, Jessie Brandix—Julie A. Crosby! Joe pushed the button and then, without waiting, pushed open the front door and walked into a little hall. As soon as he did he knew that Julie wasn't home.

In Julie's apartment was the hat she had worn the morning they drove out to New Jersey. The reversible coat she had worn that same morning was tossed over a chair. Joe looked in a clothes closet, hoping to find a slipper with a heel off. There were lots of shoes, but none there with a heel off. Joe picked up a black slipper and examined it. It had a heel like the one he held in his hand.

"Wonder why she wore those other shoes when she had all these little slippers in her closet?" Disconsolately he walked out, down the stairs and into the street. He was at a new low.

On his way uptown he had trouble keeping his hopes up about the possibility of someone else being in town, and tried to sell himself on the idea that he mustn't get discouraged.

"You've got to keep trying," he said to



himself. But he was depressed.

Late that night, exhausted, he partially convinced himself that there might be someone else besides Julie. He would have a look around tomorrow.

In the morning, as he was shaving, he accidentally rubbed some soap on the mirror. He snapped his fingers, and hurried through his dressing. He took the bar of soap from his bathroom and put it in his pocket. Everywhere he went that day he wrote on the windows with the soap, "Did you lose your heel?"

Half-way through his work he realized he had given no instructions, and started to retrace his steps, adding to his message:

"Come to the Waldorf."

Next morning Joe left the hotel around noon and walked across town to the Broadway section. He wrote a note on the window of the Times Building, doing so more as a matter of habit than anything else. He was convinced that there was no one beside himself in New York.

**D**ISCONSOLATELY Joe Dunn sat down on a bench in that little triangle of concrete in front of Father Duffy's statue and looked at all the signs. How silly they looked without any lights or motion.

"New York in your vest pocket, eh?" He went back to his old game of seeing if the sun had moved. He held his finger right on the edge of a shadow and waited, but the shadow never changed.

Several cigarettes later he started walking back across town. He judged it should have been late afternoon as he walked slowly through the Park Avenue entrance of the Waldorf and up the broad steps into the main lobby. On the top step Joe froze. Sitting primly in one of those big lobby chairs was a girl. She stood up, and neither of them spoke for a long unbelievable minute.

"Julie!" exclaimed Joe. He tried to shout it, but there was a huskiness to his voice and a queer, constricting ache to his throat. "Julie Crosby!"

"Hello," said Julie in a strained, tentative way. "I—I wondered if it would be—you."

"Julie," Joe repeated in a steadier voice. Then he was moving forward to reach her, his hand outstretched hesitantly—as though the girl would suddenly disappear before he could touch her.

And then Julie was in his arms, clinging desperately to him, and sobbing hysterically against his chest.

"Joe! Joe!" she sobbed brokenly. "It's—it's been so terrible. What on earth has happened?"

Joe held her tightly. He felt like crying himself. He was trembling all over, with hot and cold flashes using his spine for a signal beam.

"Gesh only knows, Julie," he said. "But where have you been? I remember that we seemed to fall down up there on the R.C.A. Building, but when I regained my senses I couldn't find you. I couldn't find anybody. What became of you?"

"That's what I was going to ask you," she answered after she had quieted down. "We fell, and I must have fainted. When I woke up you were gone and I was all alone. So terribly alone. I finally opened a bottle of brandy and took one drink. Then—"

"Was it night or daylight when you recovered?" demanded Joe quickly.

The girl shuddered. "It was just like it is now—late morning. The sun hasn't moved an inch since then. I've lost track of time. but it must have been days and days. I think I have slowly been going crazy."

"Somehow we got separated up there, and I missed you," figured Joe. "It was night when I woke up—and daylight when I finally reached the street. I've tried vainly to understand what has happened, but I couldn't. I've looked everywhere for the least sign of life and found nothing. I was down to your Grove Street place twice. Where have you been hiding?"

"In—in the Astor Hotel," she replied faintly. "I was afraid to walk the streets for three days. Since then I've spent all my time either in my hotel room, the kitchen, and the Public Library. I've been trying to find some sort of explanation for what has happened from scientific books. But it is all sort of a hopeless muddle, and I've been so—so afraid."

She started crying afresh. This made Joe feel more the protector.

"Here, here, that won't do," he counseled. "Let's pick it up from here. I never thought about going to the Library. I doubt if we'll find any answers there. We've got to find Reverend Fletcher again. Meanwhile, Miss Crosby, if you have no previous engagement, how about dinner with me tonight?"

Julie smiled through her tears. Then, solemnly: "I'd love to, but I have a date—a big dinner party at the St. Regis, and then on to the opening performance at the opera. I wish I could break it, but I made it weeks ago."

"Why can't you call your friends up and tell them you are indisposed?" Joe suggested gravely.

"I might," she paused. "But we're sure to run into them somewhere around town." They both smiled again, and Julie continued: "Oh, well, I'll do it. We'll take a chance. Shall we dress?"

"Dress?" Joe answered. "Of course we dress. Always dress in the jungle—white man's burden—keeping up morale and all that stuff."

Julie was now feeling so much better she laughed. "Fine. Why don't you pick me up at my place and we'll have a cocktail, say about seven?"

"Wonderful. I hope your suite is no higher than the third floor. The elevator service is terrible lately."

She gave him the number of her room on the second floor of the Astor, shook hands gaily to carry out the farce and then departed, to dress for dinner. At the entrance her fears returned.

"Joe—don't take too long, please."

**B**UT Joe had a problem. His wardrobe didn't include a dinner coat. A quick shopping trip, which included a clothing store and a small shop in the hotel, took care of his problem.

Later, as he walked up and down shaking a cocktail in Julie's suite and talked to her through the door as she was dressing, Joe glanced at himself in a mirror, and smiled with approval.

When Julie appeared, Joe realized at once that only some artist like Hattie Carnegie could have designed that little number. Joe stopped in mid-shake and stared at her in genuine amazement.

"Wonderful!" he admired. "I never realized you were so gorgeous, Julie. You should have worn clothes like that always."

"On my salary?" she came back. "But I'm so glad you like it. I've been saving it for a special occasion like this—in the shop downstairs."

Joe nodded and then turned slowly about before her. "What do you think of my dinner coat? The pants are a trifle long, but this is a spare tux I picked up today—right off a hanger over in Fifth Avenue."

They both laughed, and Joe filled their glasses. Gravely he offered her a toast.

"Thank God, I found you," he said fervently.

"Thank God," she echoed.

Two cocktails and several thousand words

later, Julie having related all the empty nothingness that had befallen her, and Joe having done the same, but with the embellishments befitting a newspaperman, the girl surveyed him thoughtfully.

"Yes, I took a drink of brandy out of that bottle you found on your second trip," she said. "Then on my way down I broke my heel off and had to limp the rest of the way. I'm trying not to think about it right now, with you here, but I finally wound up in the Astor. I just stayed. I was never so tired in all my life. Tomorrow we can start to try to figure things out, but tonight, if it is night, was that dinner invitation of yours really on the level?"

Joe poured the two last drops out of the shaker into Julie's glass.

"Finish that, my good woman, and I'll have Burton whisk us to the Plaza where I have made all arrangements for some fine groceries. The wine is, at this moment, chilled to the exact degree."

Julie put down her glass. "Who is Burton?"

"Burton's my chauffeur. Who did you suppose Burton was? By the way, why not dine here?"

"Let's," agreed Julie. "And give Burton the night off."

"A good idea. I've had him out every night for a week. Have your maid call the desk and tell him, will you?"

In the hotel kitchens, Julie, holding up her long skirt and Joe climbing on tables to look in high cupboards, they finally assembled a meal. With candles and the soup on a table, they stepped back into the lobby and walked in again bowing to imaginary friends on their way to the table. When they sat down Joe leaned across and hissed at her.

"Isn't that Manny Tomville with Meggy Jopkins Hoyce sitting over there?" And as Julie started to turn, "Not now—they're looking at us."

Dinner was fun. Once Joe pushed back from the table and looked long and hard at Julie. The girl looked up, and her eyes were filled with a curious expectancy.

"Anything the matter?"

Joe came around to her side of the table and moved the candles so that more light fell on her face. "No, but I can't get over how lovely you are, and how I could have been so blind not to have noticed it. You fooled me completely with that work in the office, photographer, career woman, low-heeled shoes, and glasses."

## CHAPTER V

*Accounts Are Balanced*

FINALLY they walked back up to Julie's apartment. She asked him up for a nightcap and went to the bar table to pour Scotch into glasses.

"Soda?" she asked. "Oh, no, I remember—it's plain water, isn't it?"

"It used to be," Joe said, "but I think the bottled variety's safer now. That stagnant river doesn't make me too happy about the reservoirs."

This unhappy remark sobered them for a while. For a moment they sipped their drinks in silence, and then Julie got up for a cigarette.

"Tonight was fun, wasn't it?" she said wistfully.

"Tonight was maybe the best fun I've ever had."

Julie acknowledged this with a small appreciative bow and went back to her chair. Joe lighted her cigarette for her and then sat facing her. He regarded her solemnly, then narrowed his eyes and squinted at her.

"You know, it's funny."

"What's funny?"

"That, out of all the people who might have been left, it's you who are here. That, lady, comes under the heading of fool's luck for me, no matter how you look at it."

A little embarrassed by his own speech Joe drained his glass and inspected its emptiness. Julie gestured toward the bar table, and Joe mixed himself another drink. The girl still didn't say anything. For a time they sat in silence.

"Where do you suppose they all went, Joe?" she asked faintly. "Now that you are here with me I'm getting a firmer grip on myself. I'm not so scared anymore, but what's it all about? What has happened to us? And why?"

"I don't know," admitted Joe slowly. "If we had only got more information out of that Fletcher instead of laughing up our sleeves at him."

"I wasn't laughing while we were in that—that queer room."

"Neither was I. Frankly, that man baffled me. But what the devil did he mean about that Universe Master business? I haven't been a particularly religious man, but I know that none of that stuff jibes with any part of the ideology of the entire world. I just

don't get it!"

"That room in that school house was like no room I ever saw before," mused Julie.

"No, it wasn't. It was more like—like a focused spot in space. Like being inside a cloud—or something." Joe was groping for words to express this intangible and abstract idea.

"Exactly," agreed Julie. "Joe, the only thing to do is for us to go back to Berry Meadows and find Fletcher. He's simply got to be there! And we've got to make him explain—make him right all this—this crazy business, if he really had anything to do with it."

"It's a long walk," commented Joe significantly.

"I know," she said. "But we'll have to face it. But we don't have to start out right away. Let's rest up and explore New York first. Perhaps Fletcher will come to us. He said he would be at the latitude and longitude of Radio City once. Anyway, we have plenty of time—all the time in the world."

Her shoulders began to shake, and Joe could see that she was on the verge of hysteria again.

"Fine idea," he said promptly. "We'll play around for a few days. How about lunch tomorrow?"

"Lunch would be swell. We can both sleep late—this no darkness stuff has thrown me off in my sleeping habits. But where shall I meet you? How will we know what time?"

"I'll come for you here. Goodnight, Julie."

She arose and held out her hands. He took them firmly. He wanted to kiss her, but he did not. There was too much else worrying him. He just pressed her fingers tightly and then released them.

"Goodnight, Joe," she said bravely.

He picked up his hat and, with a little encouraging wave of his hand, went out. Julie stood for quite a while at the door, watching and staring long after his figure had passed out of sight down the stairs. . . .

During the next few days Julie and Joe really covered the elite spots of the town. They did all the things and saw all the places every visitor and worker in the metropolis once had wanted to do and see. They went backstage at the Music Hall, visited every famous nightclub they could reach without too much walking, stopped in at the American Express and arranged an imaginary trip around the world. They even went behind the scenes at such places as the Automat to learn how pies and sandwiches used to

slip out through the little glass doors.

But none of this was fun. No mechanism would work for them, and the utter absence of other people made all pretense futile and vain.

They turned from this to shopping, but aside from picking out an occasional article of clothing they disturbed nothing. What point could there be in selecting furniture, bric-a-brac, jewelry, money—or anything—and carrying it from one place to another? Didn't they own the whole of the city, perhaps the entire world? Why lug stuff around? Just use it where they found it.

IN the course of time a trail of broken windows and smashed doors furnished mute evidence of their various excursions about Manhattan.

"Enough charges of breaking and entering to send both of us up for two hundred years," observed Joe. And this remark gave neither of them a laugh.

Such places as grill-protected establishments they made no attempt to enter. Why waste time and effort to cut through metal grills to get to something for which they had no use?

And all the time they knew they were simply putting off the necessity of a hundred-mile walk to a place called Berry Meadows because they were afraid they wouldn't find Fletcher B. Fletcher when they got there. And with this final hope vanished there would be absolutely nothing left for them but madness. There was a sort of intimacy between them, yes. They knew they were falling in love with each other, but they never spoke of such things. They were like two babes lost in a modern wilderness, still groping to adjust themselves to a condition that was too vast and too shocking to believe fully.

Then came that priceless moment they were strolling up Fifth Avenue toward Central Park, pretending they were in the Easter parade. As they crossed Fifty-sixth Street Joe became aware of a sudden dizzy feeling. He almost reeled, and he noticed that Julie did the same thing. It was as though the earth beneath them had shuddered. Not a local surging or buckling of the pavement. Not even as an earthquake ripple. It was more as though an immense body had sluggishly started to move. Like a subway train starting up, only on a far vaster scale.

They steadied each other and looked around fearfully.

"Look!" said Joe, pointing upward at a

tiny patch of cloud that had hung in the same spot in the sky like Coleridge's "painted ship upon a painted ocean."

Julie stared. "Joe, it's moving!" she cried.

Joe placed the edge of his shoe right at the edge of the shadow of a building, and they stood there staring down. Minutes went by, and then imperceptibly the shadow moved up over the edge of the sole and slowly crept across the toe cap.

Joe straightened up and rubbed his leg to ease the aching muscles.

"What do you think that means?" asked Julie, frightened.

"We are in business again," said Joe, placing a coin a couple of inches inside the shadow and stepping back in the shade to watch.

Julie sat down on the curb to wait. After a while the shadow was eaten away and the coin lay glittering in the sunshine. The world was on its daily round once more.

"I think it is a good sign," said Julie. "Maybe a car would run again. Anyway, let's plan on setting out for Berry Meadows early in the morning—if there really comes a night and morning."

"It's a date, darling," agreed Joe promptly. "And do you know what we ought to do tonight? We should get up in some high place so that if there's anybody at all within miles of here we might see a light. If it stays as clear as this, they say—they used to say—you can see forty miles from the top of the R.C.A. Building. How about going back up there?"

"Right after dinner," said Julie.

Almost gaily they went on to the park and spent hours strolling through the expanse. While there were no animals in the zoo, no birds or squirrels or living and crawling and creeping things in evidence, there was a breeze, and the ground felt good and alive. And the afternoon shadows crept eastward in a perfectly normal manner.

They had dinner at dusk in a restaurant on Sixth Avenue, an almost pleasant business of canned stuff and bottled delicacies. Then they crossed to the R.C.A. Building and started their climb.

It must have been past eleven o'clock by the time they reached the top. It was a beautiful, warm night as they walked out on the parapet and sat on the bench to rest. Julie took off her shoes for a moment, while Joe relaxed and slid down on the end of his spine to gaze enraptured at the night sky.

They were facing west and could see the

Hudson which was a solid ribbon of silver in the moonlight. Beyond the Palisades the flat New Jersey meadows stretched out as far as the eye could see.

"Tomorrow," said Julie eagerly, "we go over there again. Isn't it wonderful, Joe, that there will be a succession of tomorrows again?"

"Yeah," said Joe, grunting as he sat up. "Tomorrow I want to get my hands on the Reverend Fletcher B. Fletcher. After that I must take the time to tell you how much I love you. Then, if people don't come back, we can plan what we are going to do, anyway. At last we'll be able to get somewhere if machinery will work again."

"You can tell me now if you like, Joe," said Julie, slipping her slim feet back into her shoes.

"Come on, Julie," said Joe, helping her erect. "Let's take a look around from all four sides while I get up enough nerve to speak."

Together they examined the city which was bathed in silvery moonlight. But there was no flicker or beam of any other sort. They were still completely alone in a deserted world. The wind was freshening and becoming gusty.

As they leaned against the rail and lighted cigarettes Joe put his arm around Julie and drew her close. She snuggled up next to him, and he thought he detected a faint shudder. The same thought was going through his own head. It was no use pretending or hoping any further. They were the last two persons on Earth.

**C**AREFULLY Joe took the final drag on his cigarette and flicked it out into space. Silently they watched it curve outward and then fall downward like a tiny meteor. The wind caught it and swept it against the building and out of sight.

"Look, Joe!" exclaimed Julie, pointing southward. "Lightning. A storm is approaching. And that's where the other storm came from. Remember?"

"Yes, I do," said Joe shakily. "It's already spattering rain."

He drew the girl close to him and she raised her face to meet his eyes. There was no fear in her features now.

"I love you, babe," whispered Joe. And he kissed her just as there was a tremendous clap of thunder.

In a vast room of indefinable shape, surrounded by nebulous glimmerings of busy machinery and suffused with light from an

indeterminable source, three manlike figures gathered in conference around a huge desk. Beyond them was something akin to a door which was open and on which was the glowing sign:

#### THE UNIVERSE MASTER Bookkeeping Department

Through the door could be glimpsed rows and rows of desks which stretched for miles. On each desk was a large, shiny, complicated looking adding machine. On the side of each desk was a tray filled with cards. The operators, all dressed alike and immobile of face, fed the cards into their machines, pushed buttons and pulled levers with deft speed.

But there was no sound. Even the supervisors made no sound as they walked along the aisles to pick up the tally sheets pouring from the machines and fed them into overhead pneumatic tubes which conveyed them to a giant machine at the near end of this gigantic room.

At first glance the colossal machine looked like an over-sized newspaper press. A second glance showed that it was a super-adding machine—an adding machine to end all adding machines. Atop this unbelievable pile of equipment which was more than five stories tall, a row of digits which ran into some sixty figures was constantly changing, increasing the growing total.

In the mistily outlined office the first man was speaking. He was highly annoyed.

"I don't want to hear any more about these so-called efficient machines. They are no good. Here we are working overtime for the seventh straight night, and still we can't balance the books. You, Fletcher!" And he pointed his finger at a tall and gloomy-faced individual. "You talked me into installing this machine business—this system.

"I have been closing out planets for the Universe Master for eons with good, simple, old-fashioned astral buttons—and never one bit of trouble. And the first time we try this efficiency method of yours, we can't strike a balance. If the total doesn't come out right on this run, we are going to junk all this stuff and go back to the old method."

Fletcher looked woebegone. "I am sorry, sir. I simply can't understand what has gone wrong. You called me back from a very important way-station in the Arcturus System. How much, may I ask, are we off tally? Did you deduct for the number of special deputy agents I listed?"

For the first time the third man spoke. He was apparently in charge of this particular department.

"Certainly," he snorted. "We do not make such elemental errors in this division, Fletcher." He went on to say their books showed a total balance of 7,768,984,435 homo sapiens, but that their pick-up showed only 7,768,984,433. "We are two short," he continued. "It isn't much, but we cannot close the books until they balance."

JUST then a fourth man came striding hastily into the office. He was carrying two cards in his hand.

"As per your orders, sir," he addressed the boss, "I started the Solar machinery once more to check the entire mechanism. Some stray pair might possibly have got away on an experimental rocket flight. But I think I found the trouble more simply. One of the operators found these two cards clipped together in the back of file box NY Seven-three-one-four. I think that is the file for a place called New York."

The boss took the two cards and read aloud. "Joseph Gordon Dunn, Three thirty-four East Fifty-third Street, New York City, U.S.A., Earth. Julia Marguerite Crosby, Twenty-two Grove Street, New York City, U.S.A., Earth."

"Of course!" exclaimed Fletcher, beaming. "That's the pair of humans I put at the foot of my list as alternate deputies. I made a notation to that effect in my report."

"Well," rumbled the boss, slightly mollified, "they had no business getting lost. Go get them, Fletcher, and place them in the active deputy file, and then you can return to your Arcturus survey. We will close the Earth account at once. And get rid of those infernal machines. They're a confounded nuisance. I could close out an entire galaxy with an abacus. . ."

So, there was a loud clap of thunder just as Joe Dunn kissed Julie Crosby. And then, suddenly, the wind and storm froze into rigid silence. There was nothing left on the top of the R.C.A. Building to cast a human shadow.

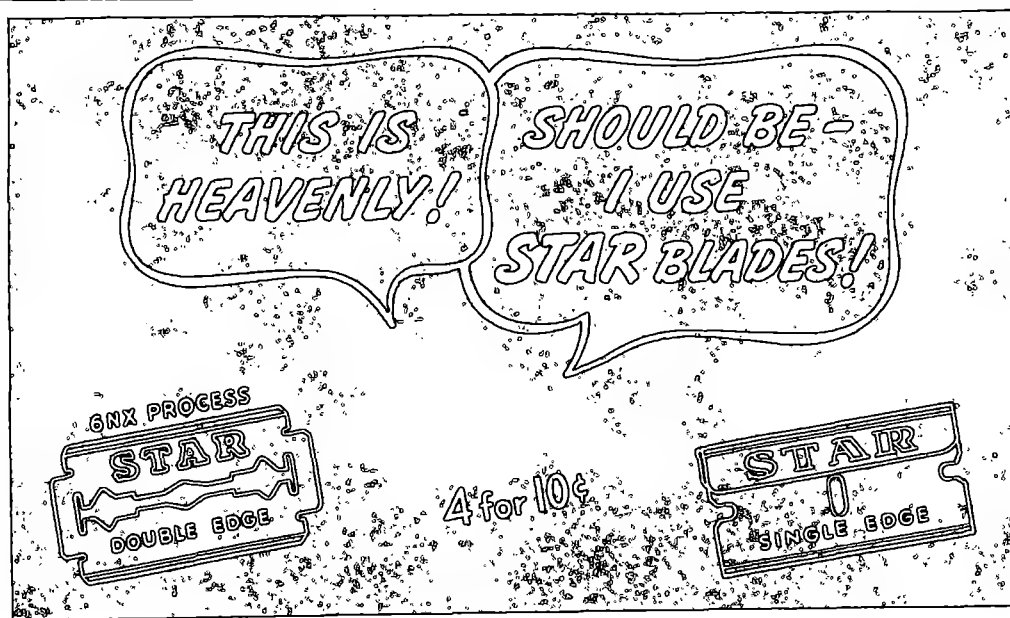
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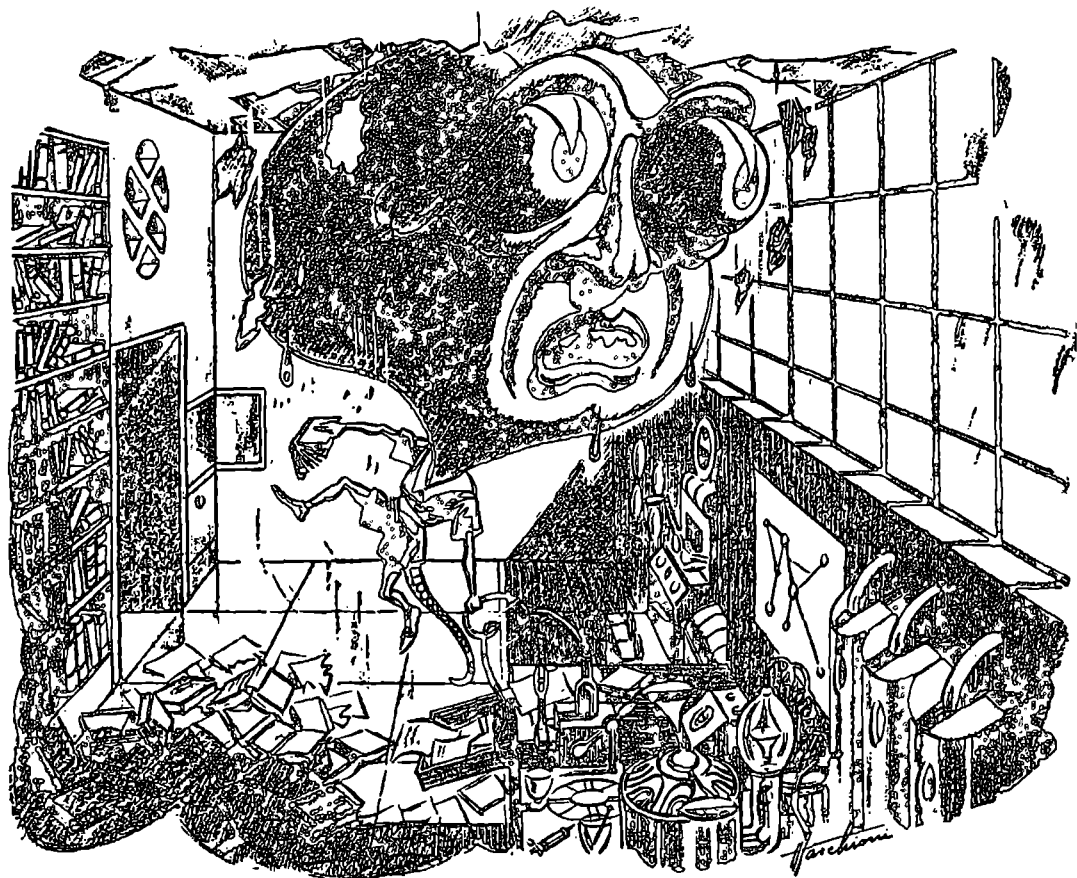
## PI IN THE SKY

*An Entertaining Fantastic Novelet of Stars Gone Haywire*

By FREDRIC BROWN

PLUS MANY OTHER UNUSUAL STORIES





Yooggl's body zoomed upward and his head crashed through the skylight

# BLOATED BRAIN

By ALFRED G. KUEHN

*The Secret of a Mind Stimulus Has Amazing Results!*

YOOGGL nervously fingered the tubular atom-blaster beneath the heavy folds of his dark tunic. It was late and the Zurmanian damp had a clammy eeriness about it that tingled the hairless tip of his trailing appendage. Yooggl crouched motionless in the thick shadows of an archway as the clacking sound of the steps grew closer. He knew he had no business being out at this time, and if he were caught—

They came finally into hazy view. A steel-shod squid man, with a pair of drunken, slithering Gurks in tow. The Gurks' jointed antennae were faintly phosphorescent with the

glow of maryeena. Yooggl shuddered as the fierce insect-men passed by. There had been rumors about them lately of a cannibalistic atavism. Yooggl waited two minutes, then fled stealthily in the opposite direction.

Planetoid Clinic was dark when Yooggl reached it, except for one beam-ray glowing dimly in the dome. Yooggl whispered a number into the oscilla-phone and the panels slid aside. He stepped quickly inside, then whispered a different combination which would keep the panels locked.

The flight tube was half-way down the darkened hall. Yooggl entered it silently, and

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A PRIZE-WINNING AMATEUR CONTEST STORY

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whispered the single word, "Observatory." Noiselessly, and with incredible speed, the tube whisked him up nine hundred levels to the Clinic's pinnacle where the skylight laboratory was located.

Yooggl stepped quietly out into the corridor. The blaster was in his hand now as he cautiously slid along the shadows to the side of the laboratory. He paused there, listening. There were sounds of activity within the laboratory. Professor Krex, no doubt, was conscientiously at work. There was a rattling of beakers, a clicking of test tubes, and another—a faint sibilance, as of an electro-torch's hissing.

Yooggl moved closer, and peered stealthily through the observation panel. Then he stiffened. His eyes narrowed, and he swore softly under his breath. The professor was working on the brain-stimulus!

Professor Krex's warped, hunchbacked form was bent awkwardly over a laboratory bench. His single, sunken, myopic eye was shining—radiant. He was watching a retort filled with a thick, syrupy substance, slowly heating over an electro-torch's flame. The mercury in the thermometer was gradually rising. Krex gave a grunt of satisfaction. He thumbed shakily through a pile of notes at his side.

A THIN smile teased across Yooggl's hard mouth. Perhaps the old boy wasn't so dumb after all. If he had finally hit on the right catalyst—well, it would save him a lot of work.

Professor Krex turned the flame up a trifle. A group of tiny bubbles were beginning to form on the retort's bottom. Slowly, they grew larger and oozed their way up through the gelatinous mixture.

A minute passed. The retort became a foamy, effervescent froth. Krex snatched the torch from beneath the retort. And watched.

Yooggl held his breath. Many times had he reached this point himself—and failed. Would the reaction follow this time? If it did . . . Yooggl gripped the blaster tightly.

Krex was checking the notes. He ran a bony hand uncertainly through his tousled white hair. The retort was rapidly cooling. One last bubble oozed its way to the top and burst with a little ping. Krex watched anxiously.

Then, just as the thermometer registered normal, there were signs of activity. Some latent, hidden energy was slowly being re-

leased. A new set of minute, almost microscopic, bubbles was forming. Slowly, very slowly, they became larger and rose lazily to the top, releasing a heavy, purple vapor.

Krex gurgled with delight. He was finally succeeding. With trembling hands, he quickly attached a long series of chemical filtration tubes, and a curiously constructed condensation apparatus.

At that point Yooggl lost his balance. His right knee bumped the wall harshly. He inwardly cursed his clumsiness. Would the old man hear?

Krex, squinting from the bright lights of the bench, gave the panel-way a searching glance. Apparently satisfied that nothing was wrong, he continued working. He added a little of a viscous emulsion to the contents of the retort. It began to bubble violently. The purple vapors started to curl through the winding tubes, down through the condenser.

In a few minutes a phosphorescent lavender drop formed on the outer end of the condenser, splashed into the waiting beaker. Splash, splash, splash. Drops rapidly covered the bottom. They were luminous, sparkling.

Yooggl decided it was time to act. He kicked open the door, and pointed the blaster.

Krex wheeled, his face pale.

"Yooggl! What are you doing here?"

"You know blasted well why I'm here! I wasn't kidding last night."

"It won't do you any good to kill me, Yooggl," Krex said quietly. "The fluid is worthless without the powder. And I'm the only one who knows its secret."

"Quit stalling. I saw the notes."

"They're incomplete. Fortunately, I destroyed the others after I caught you sneaking in the library last night. I should have turned you over to the patrol."

Yooggl jabbed the blaster hard into Krex's emaciated chest.

"What's to keep me from giving it to you right now, just for spite?"

"Nothing, I suppose. Except your egoistic greed for power."

Krex stared fearlessly back into Yooggl's threatening gaze. He straightened himself up as much as his crooked back would allow.

"You'd like to use my discovery for your own selfish, wicked purposes, Yooggl. My brain-stimulus would give doctors, surgeons, and scientists a wonderful new power to benefit mankind. I've spent a lifetime de-

veloping it. And now, give it to the likes of you? Never!"

Yooggl flushed angrily. He hadn't thought the old man had that much spunk in him. He picked up the notes, shuffled through them. Krex had not been lying. The powder formula was missing. Yooggl threw the papers savagely in the professor's face.

Krex's heavily-lidded eye blinked.

that wrinkled eyelid of yours?"

Krex drew back. His face paled and his bony hands trembled.

"You wouldn't!"

"Oh, wouldn't I, though!" snarled Yooggl.

The Professor covered his face with his hands. His frail body shook.

"All right," he said at last, in a tired voice. "I'll do it."

## Meet the Author of This Story



TWENTY-NINE years ago, in Milwaukee, I weighed exactly three and one-half pounds, and eye-dropper feedings brought complete gastronomical satisfaction. Today, I hit around the one-seventy pound mark, and nothing less than a two-inch-thick T-bone, with double portions of French fries and apple pie a la mode on the side, can produce that same inner satisfaction—if I could get the steak. Guess I was more contented in '14.

It was in high school days that an interest in the laboratory sciences was developed. Especially chemistry and electricity. The period following was filled with electrical tinkering and ultra-shortwave radio transmitting and experimentation.

College days were interrupted by a long hospital seige with an ankle thoroughly smashed at ice skating. When I was finally able to walk again, it was '33 and the depression was in full swing. I searched for work, and was, variously: clerk, salesman, bookkeeper, photographer, stenographer, radio repairman, baker, and cake decorator. The last for five years.

At present am employed as an electrical tester in a War plant manufacturing motor controls for Army and Navy invasion equipment.

The girl I married was a dramatic star in a "little theatre" guild, and her background has been most helpful, as well as maddeningly critical, in sparking up the dialogue of my literary endeavors. We have a one-year-old son, "Gibbie," whose latest tentative claim to genius is a terrific keyboard rendition of Tschaikowsky's piano concerto, in his own inimitable style—with his toes.

At present am working on a rather long novelet. At my side is "Jaax-16," an almost human (?) robot, with a chromite skeletal, neo-plasmic flesh. My story is about Jaax-16's underwater odyssey. Jaax-16 can't swim—but no matter. Neither can he breathe. He's alive, but not quite living.

And, incidentally, the entire manuscript is being typed in a dark room. Jaax-16's clammy hands on my shoulders sends emeno-ux-waves tingling through my brain, guiding my long, trembling fingers on the keys.—*Alfred G. Kuehn.*

"It won't do you any good, Yooggl," he repeated.

Yooggl looked around the laboratory. His eyes rested on a chemical-filled shelf. A cruel look twisted his face.

"There are ways to make people talk, Professor," he purred, pausing significantly between words. "Ways that a chemist like yourself would understand."

He picked up a half-full bottle of radii-ux.

"Would this help any? Say, one drop on

HE LIMPED over to a rack of assorted chemicals. He studied the rows of bottles for a few seconds, then removed three. With meticulous care he weighed off small amounts of each and ground them together in a mortar. Yooggl watched him suspiciously.

"You wouldn't be trying any funny business now, would you?" he growled menacingly. "If it shouldn't work you will pay."

"It will," said Krex quietly. "But you'll

regret this, Yooggl."

He poured the powder into the beaker of purple fluid. The liquid hissed softly. Then he filled a syringe with the mixture.

"My life's work," he sobbed, handing the hypodermic to Yooggl.

Yooggl eyed the outstretched syringe with sudden distrust. The old man seemed just a little too eager. What had he done to it? Yooggl knew that Krex was a wizard at bio-chemistry. Had he craftily altered the brain-stimulus somehow? Filled the hypodermic with sudden death? Well, there was a way of finding out easily enough.

"After you," he ordered, with a cunning grin, handing the syringe back to Professor Krex.

The Professor looked startled. He hesitated, but only for an instant. Then he jabbed the hypodermic into his arm. A fierce tremor shivered through his thin body. His hands shook violently. He staggered a few steps, and sat down.

After a few minutes the trembling stopped. He straightened, and stared peculiarly at Yooggl. The pupil of his eye was weirdly dilated. It was a black pit boring into Yooggl's head. Yooggl had the curious sensation of something crawling around inside his skull.

"How—how does it feel?" he asked nervously.

Krex continued to stare at him. Then he smiled, a queerly twisted smile. "Fine, Yooggl, fine," he said. "It's working beautifully. I can catch your every thought. Their emanations are quite clear. You have an evil mind, Yooggl. It won't do you any good."

His eye blinked, grotesquely. Like a lizard's. Yooggl tried to look away, but couldn't. Tiny-fingered tentacles seemed to be clutching at his brain. Twisting it, pulling it, knotting it. It paralyzed his mind. Some strange alien force was squeezing it into a helpless pulp.

Yooggl gave a strangled yelp. What was this anyhow? The Professor's eye. An abysmal pool of black fire. Burning through his head. Agonizing. He tried to swear. Couldn't. He was choking.

Krex arose and shuffled slowly closer to Yooggl. He spoke. His voice thundered and reverberated inside Yooggl's skull. It was deafening.

"And you would have used this power for evil, Yooggl!"

Yooggl's hands suddenly twitched. His blaster sparked. The Professor faltered.

Then the tension lifted. Yooggl shot again, and again. Krex crumpled to the floor in a misshapen heap. His lips moved feebly.

"It won't do you any good, Yooggl."

Then he lay still.

Yooggl took a deep breath. That was close. The brain-stimulus must be pretty powerful stuff. He grinned avidly. It was so simple. He, Yooggl, would now be the Master Mind of the Universe!

He searched for a fresh syringe, filled it quickly with the stimulus. He plunged the needle point into an artery and slowly pushed the plunger, forcing all the sparkling liquid into his blood stream. A feeling of extreme exhilaration suffused his entire being. His veins felt as though they had been filled with liquid fire.

Then, as his brain slowly cleared, he became aware of a strange, whizzing sound inside his head. A buzzing, whirring, crackling. He sat up stiffly, listening. The sound grew louder, with short, intermittent periods of popping noises, as though a string of firecrackers were exploding inside his cranium.

Yooggl became alarmed. Was something wrong? He had used the fluid out of the same beaker. But of course, the Professor must have felt the same sensations.

Slowly the sound developed into a low, euphonious hum. Yooggl smiled. He understood now. Professor Krex had succeeded in localizing the action of a culture of the pituitary gland hormone, through refinement and reaction with a secret solution of a substance which the world had never known. Already it was at work, creating a new, wonderfully infinite brain inside his head. He could hear it working, crackling.

**N**EW cells were being formed. Cells of a potent neoplasm which multiplied the brain tissues with amazing rapidity. Yet each new cell formed was of an infinitely minute, condensed form, so that the new brain created would be of enormous capacity, capable of illimitable possibilities, yet compactly enclosed within his own ordinary-sized skull.

Yooggl was exultant. His brain would be equal to the combined minds of a hundred, yes, perhaps even a thousand geniuses! It was an intellectual dynamo in the making! Already he could feel his brain take on an entirely new process of assembling, adjusting and classifying of all previously assimilated knowledge. All the defective mechanisms of memory and rationalization were

being scraped of their obnoxious fungi.

A new structure was being erected—a brain in which the mind revolved around rows and rows of cellular receptacles with such precision and clarity that the slightest impulse of the will brought about an incredibly perfect coordination of all thought. It was a mechanized thinking machine! Pure and perfect. It opened all knowledge and power to his will!

Yooggl decided to give his new brain a test. He hurried into the adjoining library, removed a heavy medical tome from one of the shelves. As he flipped the pages, he became aware of a peculiar fixity of its printing. He closed the book. He could still see and read each page! The words remained indelibly mirrored in his brain!

With quivering fingers, Yooggl leafed through the entire book. As fast as his eyes could glance at a page, its contents were conveyed to his brain, completely assimilated—and remained fixed there.

Then he heard the crackling in his head again. More brain cells were being formed, more receptacles of knowledge, and power! Yooggl was elated. Given the time, he could page through every book in the entire library, and have their contents indelibly printed upon his own brain.

He looked at the book in his hands, and laughed wildly. He had robbed it of all its value. It was now worthless to him. With an exultant shout, he flung it into the fireplace, and watched the flames dissolve it into a small heap of ashes.

Then, like an excited spider, Yooggl raced madly about the library. He pulled book after book from its shelves, paged feverishly through their contents. One after another they went into the fire. His hungry mind avidly devoured the cream of Man's collected knowledge. Science, philosophy, literature—all fell prey to his brain's greedy tentacles.

And as he read, Yooggl felt a powerful interchange of truths and etiologies. His new brain strode nimbly across the edge of the incomprehensible. Yooggl gasped in wide-eyed amazement at what lay revealed there. The mysterious secrets which the alchemists and sorcerers of old had sought—and failed to find!

Then Yooggl suddenly was aware that the crackling had grown painfully loud. It boomed with an ear-splitting roar that threatened momentarily to split his head.

He stood up with a jerk. He felt dizzy, could scarcely keep his balance. His body seemed peculiarly light. He felt an odd

inclination to float in the air. It frightened him. He put his hands to his head. Then icy terror struck him.

Yooggl staggered frantically to a mirror and stared aghast at the creature reflected in the glass. His head was a monstrously bloated, spongy growth—nearly double its normal size. His head was a quivering mass of cancerous tissue! His eyes were bulged nearly completely out of their sockets!

Huge beads of sweat sprang out on Yooggl's head. He sank limply into a chair, but was scarcely able to sit down! He was forced to pull himself down by the arms of the chair and hold himself there.

With a sickening start, Yooggl understood. His head was lighter than air. The new cells of his brain were composed of a new, unknown substance—a compound many times lighter than hydrogen!

Yooggl swore savagely. This was the Professor's work. Curse him! He had juggled the ingredients, injected this joker.

Even with the thought, the crackling in his head increased. Yooggl groaned. More cells! With every thought, a corresponding number of cells formed. With every book he had read, myriad cells had formed, until his skull could no longer hold them all. Then they had begun eating away the flesh and bone, changing them all into spongy brain tissues, piling up cell after cell, transforming his head into a malignant growth of bloated brain! Soon it would attack his eyes!

YOOGGL shuddered convulsively. He clutched at a bench for support. There must be some way to stop this loathsome leech which had fastened itself upon him. He searched frantically through the piles of notes for a clue to an antidote. But with each page he turned, the crackling increased in volume.

He felt his body grow lighter and lighter. His head swayed from side to side, threatening each minute to pull him off his feet. He forced his knees beneath the bench for anchor, and paged frenziedly through the sheafs of notes. More crackling.

Yooggl laughed—wildly, hysterically. He had the touch of Midas! Everything he touched turned to brain cells! Every word and thought added fuel to the fire of that torturing thing that was relentlessly eating away his body.

Yet he continued doggedly with his search. There must be an antidote somewhere! But

with each passing minute, Yooggl felt the surging in his head increase. Louder and louder grew the insane crackling.

Then, suddenly, it stopped. All was quiet. Yooggl felt a heartening ray of hope. But the next instant he realized what the stillness meant. His ears had been eaten away by the growth. They had become part of the Brain.

Yooggl jerked the drawers out of the desks, scattered their contents chaotically about the floor. In the bottom of one was a small, leather-bound notebook. The Professor's secret formulas!

Yooggl read them feverishly. Then the printing became hazy, indistinct. The lights grew dim, darkened. Yooggl clutched at his eyes. They were huge balls of bulging sponge! The Brain had attacked the optic nerves.

He was growing blind!

Yooggl held the paper almost against his eyes in a last desperate effort to read the blurred print. But it was too late. Everything turned black. He was blind!

Then Yooggl went berserk. His body shook with a violent paroxysm of wild terror. He overturned the bench, floundered wildly around the library, stumbling crazily among the debris of scattered books and papers. He groped along the walls, half pulling and half floating his way into the laboratory. He smashed bottles and flasks in a demoniacal fury to feel his way about the room. He raged and fumed at his sightless eyes.

Still the surging growth in his head con-

tinued with undiminished fury. New thoughts constantly presented themselves to the fertile Brain. An interchange of ideas of the assimilated knowledge continued to feed the avid tissues, building more and more cells. He was no longer able to control his seething, incoherent thoughts. The demon in his skull raced furiously with an unending succession of words, words, words—spawning more cells, cells, cells!

Yooggl clung desperately to the laboratory bench to keep from zooming to the ceiling. His neck was taut with the strain. It was impossible to hold on much longer. Visions of immense preponderance seeped through the surging in the Brain. But it was too late.

With a convulsive shake, his head expanded over and beyond his shoulders. With a jerk, it tore his hands loose of the bench. His body zoomed upward. With a last spasmodic effort, Yooggl clutched at the bench. Missed. He felt himself rising upward. His head crashed through the skylight, and he floated out into the early morning mists.

A staggering drunk stopped in his tracks and stared fearfully at the ghastly apparition that rose above the house-tops. A red-faced patrolman frantically turned in an alarm to the interceptors to watch for a queer-shaped invader craft. A Zurmanian astronomer gurgled ecstatically at the flash of a strange new comet streaking across his telescope.

And with ever accelerating speed, the balloon-headed phantasmagoria soared out into the void.

NEXT ISSUE'S PRIZE-WINNING AMATEUR CONTEST STORY

## STOP, THIEF!

By FOX B. HOLDEN

A SIDE-SPLITTING FANTASY OF INTERPLANETARY BANDITS

## Backache, Leg Pains May Be Danger Sign Of Tired Kidneys

If backache and leg pains are making you miserable, don't just complain and do nothing about them. Nature may be warning you that your kidneys need attention.

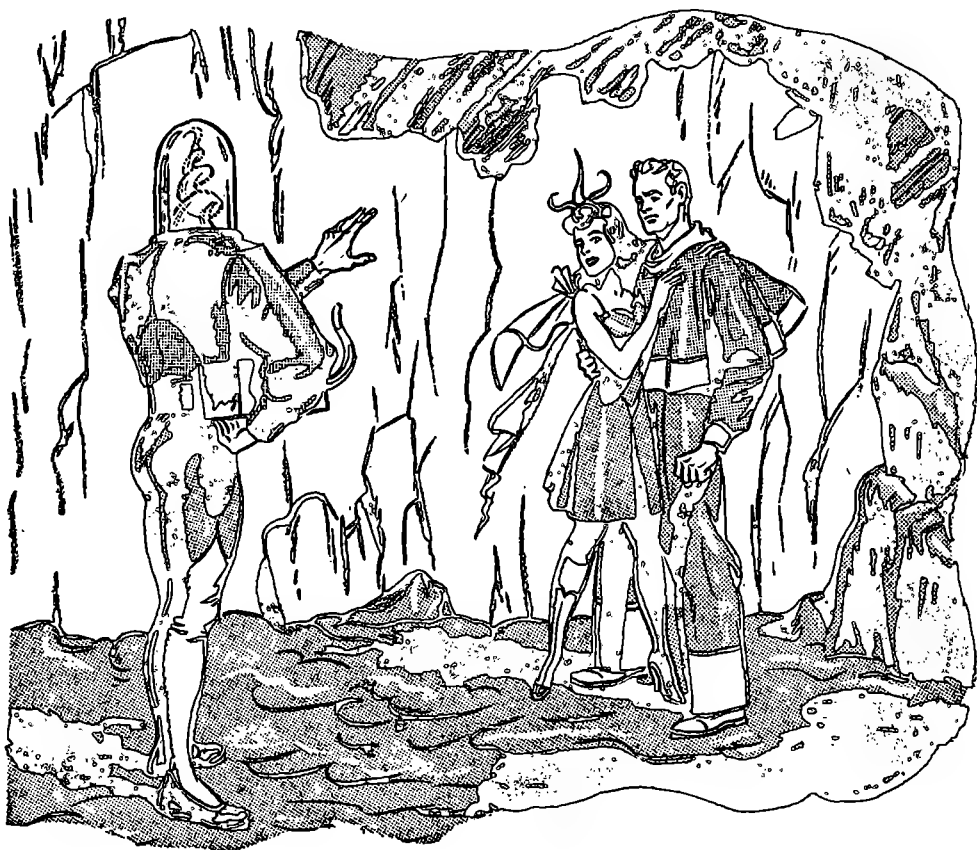
The kidneys are Nature's chief way of taking excess acids and poisonous waste out of the blood. They help most people pass about 3 pints a day.

If the 15 miles of kidney tubes and filters don't work well, poisonous waste matter stays in the blood. These poisons may start nagging

backaches, rheumatic pains, leg pains, loss of pep and energy, getting up nights, swelling, puffiness under the eyes, headaches and dizziness. Frequent or scanty passages with smarting and burning sometimes shows there is something wrong with your kidneys or bladder.

Don't wait! Ask your druggist for Doan's Pills, used successfully by millions for over 40 years. They give happy relief and will help the 15 miles of kidney tubes flush out poisonous waste from the blood. Get Doan's Pills.

(adv.)



Winslow nodded and, as the horror stopped, he seemed to increase in size

# BEYOND THE VORTEX

By FRANK BELKNAP LONG

*When a Traveler from a Distant Galaxy Kidnaps a Group of Callisto-Bound Earthmen, It Doesn't Stop George, the Photographer, from Coming Back with a Living Picture!*

“THE HAD less than a Chinaman's chance,” Ben Holden said, rattling the ice at the bottom of his glass. “Before he could lash out with his fists, they surrounded him and took him away.”

Holden looked distinctly white under the gills. He had been drinking steadily for hours, but was pale notwithstanding. He was a top-flight newspaperman, but when he got wound up, his conversation made me want to wring his neck.

He was telling it here, of all places—right here where it had happened, by Charlie's bar in Callisto City, under the swollen red disk of Jupiter.

“When you get an assignment like this, you go all to pieces,” I grunted. “Are you a newspaper guy or a mouse?”

He drank what was left of his rye.

“A mouse,” he said. “Right now I feel as if I were in the biggest cat you ever saw, being digested.”

We hadn't much to go on. It was all ru-

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A FANTASTIC COMPLETE NOVELET

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mor, and did-you-hear-what-happened-at-Sloppy-Charlie's-bar-the-night-before-last? A big-game hunter named Dawson had disappeared. One minute he was standing by the bar, waving his arms about. The next, something resembling a looking-glass brought to a boil swirled up about him. When the glimmering subsided, he just wasn't.

No more to it than that? Well, there was a little more. Before it happened, a dozen shadowy shapes surrounded him. One looked like an alligator walking upright, balancing itself on its tail. Another was like a grinning toad, still another like a gigantic skate.

In the depth of the glimmering were three or four cylindrical, slimy things. They were garden slugs perhaps, or perambulating eels. With them were a couple of lobsters, a furry black-and-white mammal—a panda? Could be, except for the fact that there are no mammals on Callisto. The tundra is covered with a thin, purplish lichen, and through it scuttle rust-red crustaceans not unlike fidler-crabs.

On Jupiter, of course, on the vast equatorial plains, there are huge furry animals galore. They are not mammals by any stretch of the imagination—not even oxygen-breathing animals. But the methane-breathing beasts with pressure-withstanding pelts and external lungs which roam the Jovian plains have evolved about to the panda level.

Silhouetted against the penny-sized disk of the sun, with their blubbery lungs tucked in their belly pouches, they might have convinced a few people they were pandas. But the penny-sized sun wasn't on Jupiter. It was a cold light bulb, and it swung above Sloppy Charlie's bar on Callisto, where nothing like the Dawson business had any right to happen.

There had been seven eye witnesses, including the bartender. Seven frightened people had seen it happen—seven swacked people, perhaps, but their stories tallied. Braving ridicule, they had assured the Callisto City police that Dawson had vanished screaming, jerking his elbows and writhing in the grip of two enormous lobster shapes.

The fact that Dawson was a famous hunter, who had bagged struebestes on Saturn and descended into active volcanoes on Ganymede to clamp bubble traps over fiery crater whorls made it a story. And if you think the city editor of the Callisto News-Gazette applied a skeptical yardstick to stories you just don't know our skipper.

He had called Ben into the city room, and fixed him with a fishy stare.

"It may not have been animals," he mouthed, "but something happened to Dawson to make him disappear. It could happen again. Go after it and stay on it. George here will shake the alcohol out of you, if necessary."

"Skipper, a story as tall as that one couldn't be news," Benny had protested. "George and I could park ourselves by that bar for six months without seeing the imposable end of a gnat."

"I want a photograph, and a story," had been the skipper's ultimatum. "If George delivers and you don't, there will be a new face right above where you won't be sitting tomorrow."

I couldn't help feeling sorry for Benny Holden. He was the News-Gazette's ablest reporter, and I was just a fotog. But he had to tank up to swing into high, and I could take it or leave it alone.

When you can get along without it you don't have to worry at all. No matter how heavily you indulge, your self-control is safe. I was feeling twice as noble as Ben, and twice as much in need of the stuff.

"Order another bottle," I urged. "We'll split it two ways."

"George, the last time we split it, my share went down the wrong gullet, and wound up in your stomach," he complained.

**I** STARED at him venomously, but before I could take a poke at him, my neck hairs stiffened and a shiver ran down my spine.

The man was attired in a rust-colored pressure suit and high tundra boots. There was an oxygen pack on his shoulder and an anti-grav belt hung in loose folds from his waist. He looked perfectly normal in all respects except for one thing.

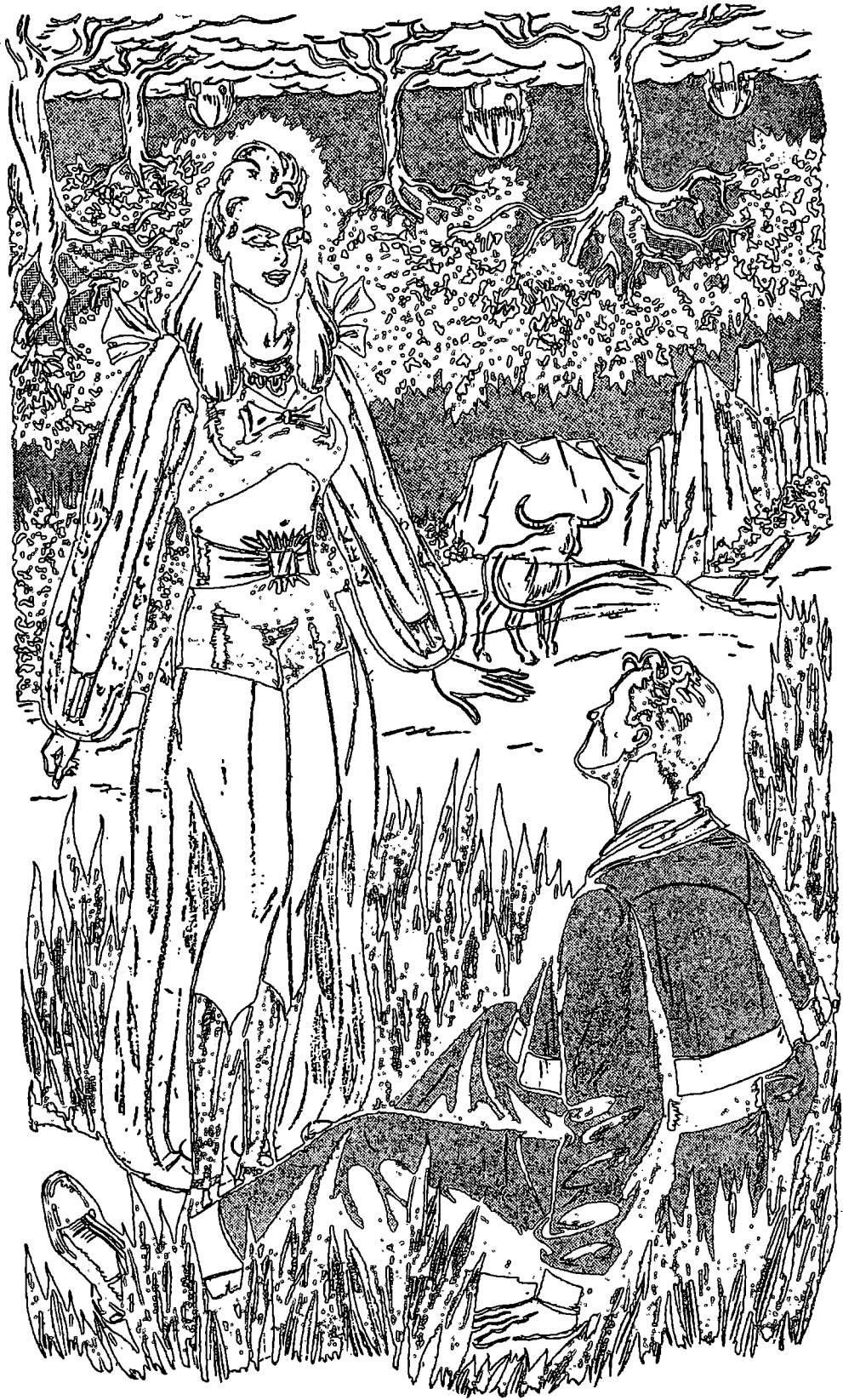
He had no head. Where his head should have been, yawned a nebulously weaving spiral of iridescent mist. He was standing between Ben and myself. He had wedged himself in between us and was drumming with his knuckles on the bar.

"A straight whiskey," he said. The voice came out of the spiral and seemed to reverberate along the bar.

Ben let out a strangled moan and crumpled to the floor in a dead faint. I was made of sterner stuff. All I did was jerk my shoulders and leap back as though a cobra had materialized a yard from my face.

The stranger turned slowly and transfixed me with a warning stare. Behind the mist, a





Standing directly above me was Mona Colbin—a blond bombshell if there ever was one

face that wasn't there was unmistakably telling me to keep my shirt on, or else.

The voice came again.

"I wanted a bracer first. You'll probably kick up a row, and I'll have to get tough. Inside, I'm a gentle sort of guy."

"Who are you?" I choked.

"You don't know me? You've photographed me often enough. I'm Winslow—Dawson's buddy. My head was clawed off last perihelion by a struebeste on the tundra."

The revelation seemed to dry out my throat.

"Winslow—Dawson's buddy," he reiterated. "Hold on to yourself, man. You're responsible for me. I was on your mind, but now I've stepped out from you. Electromagnetic chain reactions inside your brain, you understand? The vortex solidifies them."

"The vortex?"

"You're standing in a unified field vortex. Dawson might have brought me back, if he hadn't had so many animals on his mind."

I had the ghastly feeling that he was sadly shaking his missing head.

"Poor old Dawson looked and acted tough, but he was just a scared kid inside. He wanted to go home. He was always dreaming about the mountains, rivers and valleys of Earth. He was so homesick he kept visualizing terrestrial animals, even when he was stalking big game on the tundra."

The stranger's missing face seemed to stare straight at me.

"Your mind is full of smashed-up wretches like myself. Maimed and crippled explorers, lads with neutron bullets in their insides. You're a sympathetic sort of guy, and you keep thinking about the gruesome human wrecks you've photographed. We haunt you night and day."

He glanced down at Ben.

"This man thinks about nothing but women and tankards of ale. Suppose I told you that you've populated a huge strip of territory, just by standing here. The vortex solidifies cerebral chain reactions. Just by standing here and visualizing me you've brought me back. You've brought back smashed-up wretches and girls dead a thousand years."

"Your friend here brought back the girls. He doesn't think much of living women. He moons over ancient American cinema stars. Holly—yes, Hollywood stars. You can reconstruct a personality from an image and a voice, and the girls he visualized can hardly wait to get their hands on him."

A unified field vortex—I didn't understand

it, and I tried to plead with him for a little more time. He had hooked one arm about my shoulder and was pulling me away from the bar.

"I'll sock you if I have to," he said. "We need you out there. Dawson's animals—"

Something seemed to snap in my brain. One minute I had my feet firmly planted on the sawdust in Charlie's place, and the next—

I was lying on my back in long, purple grass, my ears deafened by savage snortings, my mouth choked with mud. Furious hoofs were churning up the earth on both sides of me, and clumps of turf kept bouncing off my chest.

I was lying directly under the water buffalo, staring up. I could see its gigantic udders, the gleaming curvature of its flanks. I knew it was a water buffalo because its horns were enormous, and it had the deceptive docility of expression which distinguishes that animal alone.

Through its completely transparent bulk, I could make out the outlines of trees which seemed to be growing downward from the sky, of domed huts suspended in midair.

My clothes were clammy with sweat, and when I tried to sit up, the water buffalo's tail flicked back between its legs, and laid me out flat.

"Well, boy, you asked for this," I remember thinking. "You've been taking too much too fast too long. This is the payoff."

"Shoo, bossy, go away." The most musical voice I had ever heard came from somewhere behind me.

**I**NSTANTLY the snortings subsided and the hoofs became motionless, as though the ground had hardened to the consistency of cement. Without a backward glance the water buffalo elevated its mud-encrusted rump, and moved off through the purple grass, wagging its tail.

"Oh, dear, are you hurt?"

I groaned and sat up. Standing directly above me, her hands on her hips, was Mona Colbin. You've seen her in the ancient films—a blond bombshell, if ever there was one. Cornsilk hair, eyes like the sky over Io—a deep, limpid blue. A mouth resolute, but lovely—

You've seen her in the films, but I saw her in the flesh. She had been dust for a thousand years, yet there she stood—green sunlight in her hair, her shadow sweeping in lithe lines over the purple grass.

"Dawson was only nine years old when he saw a water buffalo," she said. "A little boy in knee pants. He visualized it as transpar-

ent and docile, with a long tail. You see, it was hazy to him, and he made it a gentle, transparent beast."

"I see," I groaned untruthfully.

"Once in a while one doesn't act that way. Intestinal worms. But you talk to it, you call it bossy, and it calms right down."

"Good heavens!" I muttered, getting swayingly to my feet.

"You're the man who takes gruesome photographs, aren't you?" she asked. "I knew you'd be coming here to help us. Winslow said he'd persuade you to come. Winslow came out of your mind, didn't he?"

"That's what he said," I choked.

"Well, I came out of Holden's mind. Just three hours ago, as you think of time. But of course there is no time here, and we do not think of it."

She gnawed at her underlip.

"This is Dawson's land. He visualized the scenery and the animals in a wild burst of imagination. It's a steamy jungle land, but it's no worse than the chill, cold grayness in the depths of your mind. Winslow says you think in gray abstractions—like a mathematician."

I stared dazedly around. Apparently Dawson had stood in Charlie's place and thought about the wildest scenery I had ever seen. It was partly upside down, like a mirage. Between clumps of jungle grass and gigantic trees, a swollen green sun smoldered dully.

There were islands of foliage directly overhead, and the roots of the upside down trees seemed alive. As I stared up at them in horror, they appeared to writhe against the solar disk. It may have been the glare, but for an instant I had the illusion that something wet and repulsive was hopping around on airborne lianas a yard from the sky.

Mona Colbin was staring at me reproachfully.

"What an opportunity you had. Winslow says you stood in a unified field vortex which came from the Great Nebula in Andromeda. He says the vortex has been hovering for two days in a place called Charlie's. You could have imagined a glorious land—a land overflowing with a little of everything.

"But all you did was visualize gruesome photographic closeups. Men without legs, men without—"

She shuddered.

"That's all you did. Gruesome figures against a foggy background. And that little wretch Holden was so busy concentrating on our ankles he failed to notice that we were working on location in the Grand Canyon.

Winslow says it was all there in the ancient films, but he just left out the background."

"He left out the background?"

She nodded.

"Yes, precisely as you did in your closeups. You and Holden stood in the vortex and visualized people. Dawson saw animals. But only Dawson visualized a background for his solidified cerebral images. Winslow says there are no mental barriers now between what you and Holden imagined, and what Dawson imagined."

"I don't see—"

"Oh, it's really quite simple. Winslow says a unified field vortex melts down the barriers between minds when it solidifies mental images. He says it makes everything flow together, sort of.

"He says we're in this steamy jungle land because you failed to provide backgrounds for us. You see, the only imaginative background inside the vortex field was Dawson's land. Naturally we flowed into it."

"You flowed—"

"Yes, quite naturally. We needed a solidified imaginative background, because we're solidified mental images. I came out of Holden's mind, but now I'm inside Dawson's imagination. If you could visualize a safer background it would solidify elsewhere, and we could all go into it. Dawson's animals could go into it, too, of course, but Winslow says they probably wouldn't. He says—"

SHE screamed, and leapt back into my arms. The snake was unmistakably a cobra. As though infuriated by our conversation, it had reared its hooded bulk above the purple grass and was gliding swiftly toward us.

The fact that Mona Colbin was in my arms should have robbed death of its sting, but there is something about a cobra—Her slender loveliness was an encumbrance which brought a shiver to my spine and turned my blood to ice.

"Let go of me," I pleaded. "You're tangling us up. For Pete's sake, girl—"

"Watch out for your eyes," she shrieked, clinging to me with all her strength, and digging her little, hard knuckles into my shoulder. "It's a spitting cobra."

Before her advice could take effect the reptile hissed loudly, and sprayed us with venom.

"It's all over," I thought, clawing at my cheeks and reeling backward.

Almost instantly my eyes began to smart, and a dizziness swept over me.

"Visualize an antidote quickly," Mona im-

plored. "Try, oh, try. The phial will leap into your hand."

"Cobra venom is a nerve poison," I groaned, watching the snake sink back into the grass, and seeing a skull where Mona's face should have been. "There is no known antidote for the bite of the Colubrine snakes. Antivenin would be useless. We—"

"Then visualize three minutes," she implored wildly.

"Visualize—"

"Two or three minutes. Visualize a little, choppy wave of time. Get the feel of three minutes, and then—unwind it in your mind."

It was sheer insanity, but I made the effort. Instantly she leapt backwards out of my arms and the cobra reared up again. But instead of advancing upon us it receded jerkily through the grass, its hood deflating like an ancient American automobile tire.

"You did it!" she sobbed, staring at me as though I had turned myself inside out without using my hands. "There is no time here, but you dissolved a portion of Dawson's imagination. You sent that cobra back three minutes in Dawson's mind."

My temples were bursting. I grabbed her by the shoulders and shook her until her jaw sagged.

"I can't stand any more of this," I choked. "No more of it. You've got to stop it."

"How can I?" she protested. "It has nothing to do with me. Stop shaking me, oh, stop. We've been lucky so far. Dawson's land is teeming with poisonous snakes and—carnivores."

"Cats, big cats," Winslow said, arising from the long grass by our side. "Mona is right. No use kidding ourselves. We're desperately on the spot."

I released Mona and stared at Winslow aghast. "How did you get here?"

"You thought about me," Winslow replied. "I was sitting with the others in Dawson's cave when you thought—I wish Winslow was here. You were shaking Mona, but visualizing me."

"We may as well go back to the cave," Mona said. "It's safer than the open veldt, even if Dawson is there."

Winslow's expression was grim.

"You're right, girl. We've got to stick together."

He grabbed hold of my arm.

"This way," he advised. "Follow me, and keep your thoughts to yourself."

Striding through the long grass between Winslow and Mona Colbin, I kept visualizing a straight whiskey. The thing in the sky looked like a flying giraffe, but it was so

high up I could have been mistaken. There was something utterly spine-chilling about it as it soared and wheeled, its long neck out-thrust.

A coldness crept between my fingers, and a little of the whiskey spilled before I could drink it down. Winslow glanced at me and frowned.

"You can solidify little images," he said, "but not a new background for us. You haven't enough imagination."

Mona Colbin nodded scornfully.

"He thinks in colorless abstractions, doesn't he?"

"He does. And his little Casanova friend can't remember what your Twentieth Century cin—movie location looked like. If he could visualize the Grand Canyon, we'd be out of here."

"It's a good thing he can't visualize it," I flung at him. "The earthquake which closed it up occurred in 1944. He's seen pictures of that quake, and if he visualized it in, say nineteen forty, he might leap ahead a couple of years in his mind, and—"

"That stuff is addling your wits," Winslow grunted, an undercurrent of mockery in his voice. "If Holden saw a picture of the Great Quake there must have been a girl in the foreground. He just can't visualize the Grand Canyon."

"But Dawson can visualize anything," Mona said.

"You're telling me."

"I feel sort of sorry for Dawson," Mona said. "He's System-famous and has stalked big game in far places for forty years. But actually he's just a big, overgrown boy."

"Day in and day out, during long hazardous years in the Jupiter field, he kept dreaming about the animals back home. He got them mixed up, made some of them docile, some ferocious. He visualized half of the veldt upside down, put trees in the sky—"

"I know," Winslow said. "He was plenty plastered when he stood by the bar in Charlie's place and dreamed about an Africa that never was on sea or land. He tells me he got this background out of an ancient book called 'In Darkest Africa.' Today, on Earth, only the neo-Congo reservation looks remotely like Dawson's Africa."

HE NODDED grimly.

"The animals he saw in zoos when he was knee-high to a grasshopper. Some of them came from Asia, I'm afraid."

"Why afraid?" Mona looked startled.

"The ancient Asian fauna was the deadliest on Earth. There were a few choice speci-

mens in zoos when Dawson was a kid, including those spitting cobras. But what makes it positively devilish is that he's brought a lot of marine horrors here from the Indian Ocean. I don't like what we've seen so far."

"He doesn't know what we've seen," Mona said, nodding in my direction. "He doesn't know how bad it is."

I saw the octopus just in time. We were splashing across a shallow river when it swirled up out of the muddy brown water and swam swiftly toward us.

"Look out, darling," Mona screamed, swaying back against me.

Darling! A stab of rapture went through me. It would have taken weeks to wrench such a cry from such a girl in a less insane environment. Dodging two lashing tentacles, I gathered her in my arms and carried her up a sloping bank to safety.

With a startled oath, Winslow clambered up beside us, and stared at us in bewilderment.

"Well, I'll be—"

"The instant I saw you I knew you were my man," Mona gasped, returning my kisses with vehemence. "There is no time here and no waiting. We either know or we don't."

"I get it," Winslow grunted cynically. "You're his dream girl, eh?"

"Oh, but this is genuine," Mona said. "There is nothing adolescent about the way we feel. Darling, darling, how long have I known you?"

"Ten thousand years," I said.

She smiled at me tenderly. "It was really longer than that. Much longer."

"It was before the world began," I assured her.

"Look," Dawson said, standing up and brushing mud from his trousers. "If you two want to bill and coo it's okay with me. But I'm heading for the cave."

Before I could set Mona down something bit me in a tender spot. It was an ant, but big. When I pulled it from the seat of my pants it clamped itself on my wrist, and squirted a thin stream of fluid at me from the tip of its abdomen which tasted exactly like lemon juice.

"Ugh!" Mona choked. "Set me down, George."

"A forager ant," Winslow said. "Dawson never saw one, but he read about—"

Something squashy landed on my head from an upside-down tree and ran down my face. It had bristly legs and a wet, soggy mouth.

"Stanley never had to put up with this," I choked, digging it from my armpit, and staring at it in disgust. It had water-glass eyes, and was repulsively reminiscent of an acute stomach upset.

Mona was on her feet now, tugging at me. "Come on, darling. It's getting late. When night falls in Dawson's land unmentionable things drop down from the trees and squeeze up through the earth."

The cave seemed a little askew. It was not upside down, but it loomed up out of the yellow Dawsonian twilight with distorted glimmerings. A cold chill tightened about my heart as we threaded our way around misshapen boulders to the V-shaped entrance.

SITTING cross-legged about a swollen fire were six familiar figures. Although I had not visualized them sitting up, but lying flat on their backs around the wreck of an Io stratoplane, I recognized them straight off. Charred, blackened, they still were, their faces showing the ravages of exploding atomotor valves.

One of them leapt up at our approach, and bared his teeth in the deepening dusk.

"He's filled the cave with pink and black lizards," he complained savagely, gripping Winslow's wrist and giving it a twist. "Where have you been? Why did you run out on us?"

With an impatient grimace Winslow wrenched his arm free.

"Save it," he rapped. "Come on, Craig."

The interior of the cave was vast and gloomy and as chill as a tomb. The floor was covered with writhing lizard shapes which looked like Gila monsters, the roof was a mass of dripping stalactites.

On a boulder near the entrance sat Dawson, his head cradled in his arms. His hair was tousled, and he was mumbling to himself.

"Why did they come for me? Why did my own animals bring me here? My own animals—"

Solemn and still on both sides of the System-famous hunter stood four enormous gray lobsters, their claws folded on their chests. The panda thing was lying in a coiled-up ball at Dawson's feet. But it was not asleep. It was watching him out of one bulging eye like an evil gnome.

Holden had a slender girl on his knee. On both sides of him stood other ancient Hollywood beauties, their faces flushed and resentful. One of them was kicking Holden's shins and hissing like a cat.

"Zuzu Phelan," Mona murmured. "She always was a little ticky in the coco."

**F**URIOUSLY Winslow grabbed hold of Ben's shoulders, and shook him till his teeth rattled.

"Blast you, Holden!" he stormed. "I told you to get a grip on yourself. You have enough imagination to get us out of this mess, but you'll have to sober up first."

"Oh, sho you don't like me?" Holden mumbled. "You think I can't holdge it, eh?"

The girl on Holden's knee scowled.

"I like him," she said. "He's a good guy. These girls are just envious 'cause—hic—he likes me best."

Holden's color was rising. I had seen him like this once before. When he had more than twenty rocked-in-the-kegs inside of him, he was utterly unpredictable.

"Stansh up, honeybunch," he muttered. "I'll show him I can imagish things. Boy, will I show him."

The girl descended from Holden's knee and stood sullenly, glaring at Winslow. Mona's hand had crept into mine, as though a ghastly thought had entered her mind, and she couldn't bear to be alone with it. Having come out of Holden's mind, she must have known what he was capable of. Winslow seemed startled, too.

"Sit down, man," he crawfished. "You're all right—a swell guy. We all like you."

It was no soap. A tremor shook the cave, and something that looked like a flying porcupine materialized out of thin air directly overhead.

"Ye gods!" Winslow croaked.

Erratically, the bizarre creature encircled the cave, flapping membranous wings and tinkling like a cluster of sheep bells. On a sheep, of course. Only this wasn't a sheep, it—

My thoughts began to gyrate. As though from an immeasurable distance, I heard Ben mutter:

"You're all as crazy as bedbugs. You ought to be in padded cells."

"Now, man, be calm. We're all buddies, aren't we?" I could hear Winslow saying, a note of desperate urgency in his voice. "We're your friends, and we're not crazy. You wouldn't want to drive us crazy, would you? Your friends, your buddies?"

"Could I?"

"No, you couldn't, and you wouldn't want to. Now sit down and be quiet. This little girl likes you. She'll climb back on your knee, and you can imagine that you're sitting in the Golden Falcon Night Club in Callisto City. How would you like that?"

"You're sure you're not crazy?"

"Of course not. None of us are crazy.

We're sane, sane!"

"Maybe you are right at that—hic. Maybe I should sit down."

I was aware of violent hands shaking me. The awful mixed-up feeling seemed to sprout wings and fly out of my brain. Winslow's face was studded with sweat, he was trembling in every limb and his hands were on my shoulders shaking me.

"He's more dangerous than Dawson's animals," he said hoarsely. "Our minds are not safe when he's like this. He could imagine us in a nuthouse."

"What can we do about it?" I croaked.

"You'll have to put your imagination to work. You'll have to visualize a safer background for us."

The gray spiral where his face had been looked at me steadily.

"Bringing you here was a desperate gamble, but Dawson was visualizing poisonous reptiles faster than we could cope with them. I thought there was a bare chance of sobering Holden up, and persuading him to visualize a safe country landscape on Earth somewhere—a landscape without women.

"I wouldn't trust him with a city, but he might have swung something simple like the Sussex downs, or the vineyards of southern France. A serene pastoral landscape with rivers and fruit-bearing trees, and enough depth to it for us to move around in. Instead, he's become a menace."

"Why is my imagination dangerous?" I asked.

"You think in stripped images," he said. "For instance, edible fruits, shade trees and Hollywood girls are all luscious images. I doubt if you could visualize a luscious image. You like to reduce objects to their chemical constituents. The scientific mentality, you understand?"

"When you're not jolted—no, haunted by a gruesome image like myself, a phial of  $H_2O$ , ash and potassium salts would be your mental picture of a human being. You also think in mathematical symbols."

He nodded somberly.

"It will be dangerous for us. But it's kill or cure now. We'll leave Dawson and Holden here to stew in their own imaginative juices. Your imaginative world may be a dissecting laboratory or a mathematical blind alley, but we'll have to chance it."

Mona was staring at me as though I were some new kind of monster. But her hand was still steady in mine, her look of loyalty unwavering.

"Winslow is thinking only of himself," she whispered. "He'd like to ditch the rest

of us."

There was a baying outside the cave. Dawson was beating on his chest, and one of Holden's girls was having hysterics.

"Wolves," Winslow muttered. "You'd better start visualizing. Make it a laboratory, if you have to."

**V**ISUALIZING a laboratory brought the sweat out on me. I had to close my eyes and strain over the image. It took me a full five minutes, and while I was bringing the tables into focus, the baying increased in volume.

I remember thinking that Winslow was a cold-blooded scoundrel—leaving Dawson and Holden behind to be torn by wolves, running out on them.

I hoped we wouldn't see them in the laboratory, which was almost completed now. I was standing by tall windows gazing out over a blurry grayness, my heart thudding against my ribs.

I turned slowly, dreading what I might see on the long tables behind me. I hadn't intended to visualize a dissecting laboratory, but something deep inside me kept shrieking that my imagination had gotten out of hand.

It had. There were gray cadavers on all six of the tables. Worse, cloaked, gray figures were bending above them, long scalpels gleaming in their hands.

The ghastly truth seemed to flash and scintillate all about me. Winslow's suggestion had influenced me subconsciously, and I was in a dissecting laboratory.

"More animals," I thought. "Anthropoid apes."

"No, in some respects this is more like an operating theater," said one of the cloaked figures. "These are corpses."

"Human corpses?"

"Well, now," the cloaked figure said, "you needn't be tautological. Corpses are always human, aren't they?"

I wasn't sure. I could have visualized a dictionary and checked on it, but—

"You're wrong, Madamaus, and he is right," said another figure. "'The Thirtieth Century Webster' defines corpse as follows—'a dead body as of a human being. Syn.—see Body.'"

"But all bodies are dead," said the first figure. "Besides, would you call a dead sparrow a corpse?"

"I would, yes. It is a philologically sound expression."

"But these poor gentlemen, God rest them, are neither sparrows nor apes. They are very dead human bodies."

"Who is being tautological now?" said the second figure.

Hideously it was borne in on me that I was actually in a dream. In trying to visualize a laboratory I had recaptured a half-forgotten dream of my childhood which had left an ineffaceable impression on me.

"I'll have to think myself out of this," I thought. "Mona isn't here. I'm alone here. Mona, I need you, Mona."

"Do you, darling?"

She came reeling toward me between the tables, which were slowly dissolving now.

"Mona, where are we?" I choked.

"Darling," she said. "I was in a glowing hexahedron. You imprisoned me in a hexahedron before you visualized the laboratory. Subconsciously you thought, 'Mona is a jewel. I'll set her apart in my mind.' So I was a living jewel inside your mathematical mind."

Everything about me seemed to be dissolving, turning gray.

"It's Holden," I groaned. "He's here, too. He's trying to drive us mad."

"No," Mona said, reeling into my arms. "It's just your abstract imagination. You've distorted everything because—well, you're just not used to thinking in visual terms. Darling, hold me close. Something dreadful is going to happen. I feel it in my bones."

"Bones," I remember thinking. "The human skeleton may properly be considered under five divisions. The spine or vertebral column of an adult consists of twenty-six bones, and the number of vertebrae in each group may be expressed in the formula  $C_7Th_{12}L_5S_5$ , Coccyx equals 33 bones as seen in a child, and—"

Something cold and bony was moving under my hands. I glanced down and perceived that I was clasping a gleaming skeleton, that the lower part of my own body was a grisly articulated horror.

I tried desperately, but I wasn't able to talk. My jaw had stiffened, and my tongue felt numb and swollen.

"In man and all mammals, with a few exceptions, whatever the length of the neck—"

The skeleton I was clasping seemed to be trying to communicate with me. Its jaw quivered, and words tumbled out from it.

"No, darling, no! We're healthy, normal people. We're standing in the sunlight without a care in the world. Visualize us as we really are, darling. Quickly, oh, quickly!"

The effort to visualize trees and sunlight brought a pounding to my temples, but I could have shouted with joy when a grass-



strewn slope swept into view. It was dotted with—sacred cats! It was dotted with tombstones.

Around the skeleton, there had crept a misty shimmering which was coalescing into a white and stainless shroud. The death-head that had spoken assumed fleshy contours, and the shroud began to swell, as though an imaginative child had crept beneath it, and mistaken it for a clay modeling set.

Gargoylesque putty shapes glared up at me from the crinkling expanse of linen, and for an instant my sanity tottered.

"Holden," I thought frantically. "He's caught up with us. He's here."

**A**LMOST before the thought could jell Holden emerged from behind a tomb, and tore down the slope toward us. Pursuing him was a huge and formidable lizard-shape with tiny, dangling forelimbs and ponderous lower extremities.

The creature was as pink as a newborn babe—a D. T. Tyrannosaurus, if there ever was one.

"George, old fellow!" he shrieked. "Keep it off! Keep it away from me!"

Shock must have done it. My effort at visualization must have cracked wide open, for the instant the dinosaur hurled itself upon him a deafening explosion shook the slope, and jets of steam geysered high into the air from vents in the collapsing landscape.

The veldt was bathed in sunlight when I struggled to a sitting position. Digging a soggy strand of hair from my eyes I returned it to my forehead, and stared about me. My head ached, my tongue was swollen and my spine felt like a dissolving icicle.

Slowly, painfully, my vision adjusted itself to the glare. In the muddy soil about me were huge and sinister-looking footprints, and a few feet away stood—Winslow! The big fellow's body was drenched with perspiration, and he was shading his missing face with his hand.

Above him arched the branches of a tree which seemed out of place in Dawson's land. It grew straight up out of the ground and there were no upside-down leaves on it, or flying hedgehogs hopping around in its upper branches.

Winslow was staring at what appeared to be a rent in the landscape. Jagged it was, and filled with swirling mist which kept drifting out over him. When he saw me, a look of relief seemed to emanate from his missing face. Brushing a huge, black fly

from the edge of his un-countenance he strode through the purple grass toward me.

"You're lucky to be alive!" he puffed. "Your imagination exploded right after you went through that bottleneck with Mona."

I stared up at him in sick incomprehension. "Bottleneck?"

Winslow nodded.

"Apparently your mind tightens up before you start visualizing. Straining brings on a cerebral spasm which puts a clamp on your imagination, a sort of bottleneck. You can force your thoughts through, but a narrowing of that kind can be plenty dangerous. Your imagination expands just beyond it, you understand?"

"No, I—"

"It expands, and then swirls back, creating a dangerous tension. You squeezed through yourself and took Mona with you, encased in a glowing hexahedron. But I squirmed back out when I saw the backwash coming."

His missing face seemed to crinkle.

"I saved my skin, but nearly lost my mind an instant before the bottleneck exploded. Holden was on his feet again, raving. I had to lay him out cold."

Winslow's shoulders jerked.

"A split second after I slugged him he vanished. One minute he was lying in a crumpled heap on the ground, the next he just wasn't. It has me stumped."

"I just now saw him," I choked.

"You saw him? Well, I'll be—"

The big fellow raised his hand, and flicked a condensation of water vapor from his missing countenance.

"Well, that explains it. An unconscious drunk is mentally flaccid. He could have squeezed through, all right. What amazes me is that he hasn't returned."

"It doesn't me," I gulped. "He was just now running down a grassy slope with a carnivorous dinosaur a yard from his heels. He was practically a morsel when the landscape exploded."

"I see," Winslow muttered. "Holden must be still in a fragment of the world you imagined."

He gestured toward the abnormally normal tree.

"See that foggy gap over there? That's it—that's the fragment. Holden must be still in there."

Groaning, I struggled to my feet, and staggered to the swirling, mist-filled rent which my exploding imagination had torn in Dawson's land. It had turned a rosy pink, and a faint odor of alcohol seemed to exude from it.

"Holden must be filling it with prehistoric

monsters," Winslow grunted. "I feel sorry for Mona."

A thin film of dread crept around my heart, but before it could congeal and stiffen something that felt like a dead shark's mouth caressed the back of my neck. With a convulsive shudder, I swung about.

Standing directly in front of me was a baby hippopotamus with the largest feet I had ever seen on an animal. Great, lumpishly swollen disks they were, at least five feet in diameter. From them tapered stilt-like legs which raised to the level of my shoulders a cavernous mouth which threatened to swallow me whole.

"Get back!" Winslow yelled. "Don't tempt it!"

I leapt at least four feet back, my shoulders jerking.

"A gentle terrestrial river beast," Winslow grunted, as though aware of my thoughts. "But you never can tell."

"No, you can't," I groaned. "You never can tell, can you? Why take chances? Why, why, why? Oh, my mind—it's going."

**I** CLAMPED my palms to my temples, and stared at him out of what must have been a glary-eyed countenance.

His missing features thickened.

"Come, man, get a grip on yourself. We're not licked yet. If you take it easy, you can imagine us out of this without having a spasm."

"Why should I when I've lost Mona," I flung at him. "Besides, I'm as crazy as Holden thinks I am. I'm cracking up, and I like wolves, and I don't care if I'm torn by tigers."

A queer sort of giddiness was sweeping over me. If this is madness, make the most of it, I thought wildly.

"It's Holden," Winslow muttered. "He's influencing you from inside your own imagination. If Mona weren't with him, I'd persuade Dawson to send a herd of water buffalos stampeding over that devilish fragment. A strong visual impulse would flatten it out."

A coldness gripped me when I realized that Winslow was weighing whether or not to do that anyway. Even though Mona was still in there, even though—

There was a sudden rustling like the murmur of a rising wind all about us, and into Winslow's missing face there came an expression which made me think of a mechanical doll dangling from a hangman's noose. The iridescent opacity above his shoulders seemed to curdle and assume a

lumpish expressiveness which chilled my heart like ice.

"I was afraid of this," he whispered hoarsely, gripping my wrist. "Dawson has visualized a scourge."

Even as he spoke, a double column of army ants darkened the sun-caked soil between us. Between diminishing patches of purple grass the voracious insects marched, clashing their formidable mandibles and consuming everything in their path.

Directly behind them came a Macedonian wedge of picked troops armed with enormous pincers and wasplike stingers, their slender abdomens glistening in the sunlight.

The elite formations were followed by a voracious black wave of ants which covered every inch of the landscape for miles, blotted out the sun and hung from the upside-down trees in swarming, beelike masses.

There was a continuous plop, plop, plop, as wind-lashed clumps broke off, fell to the ground and were carried furiously along on the crest of the onrushing torrent.

"They must be driver ants," Winslow diagnosed alarmingly. His featureless gaze was riveted on the hippopotamus. The animal had waged a desperate, last-ditch struggle, but it was lying utterly motionless now, its flanks hideous to look at, its long legs stripped of all flesh.

"Driver ants, forager ants and leaf-cutting ants are all army ants," Winslow muttered, his un-visage writhing. "But their habits differ. Forager ants attack spiders and small mammals. Leaf-cutting ants clip little square sections from vegetation. Only driver ants range over the countryside in ferocious swarms, and enter human dwellings."

His grip on my wrist tightened.

"There's nothing more dangerous than the detritus of an exploded imagination, but we'll have to chance it. You'd better go first. Quick, man—put yourself in motion. Do you want to whiten to a skeleton?"

I needed no urging. The rent in Dawson's land seemed to pulsate as I swung about and headed straight into it. There was a misty glimmering on both sides of me. Something that felt like an octopus with hair on its chest seemed to take hold of me and waltz me around.

When the glimmering subsided, I found myself lying flat on my stomach inside a mist-filled remnant of my own imagination staring up at the dim, still bulk of a thing.

Unmistakably it was a totem pole, but such a one as only a lunatic or horizontal drunk could have imagined. Low down on it was

the carven face of Mona Colbin, and then, in ascending sequence, came Dawson's face, my face, and a face that wasn't. A flat wooden oval yawned where Winslow's face should have been.

The topmost face gave me the worst jolt. It may have been merely a sculptured replica of Holden's face, but it had a fleshy look which made me feel as though I had been given a week's notice by the skipper and was accompanying a little, hobbling dwarf over the hill to the madhouse.

"Jungle masks and such things," it mumbled. "Congo masks. Totem poles. Why shouldn't I imagish one? Why shouldn't I, old fellish? What has Dawson got that I haven't?"

"Georgel!" a voice tore out of the grayness. "Oh, darling, I knew you'd come back." There was a patter of running footsteps behind me, and her little, cold hands crept into mine. "Darling, I knew. I felt it in my bones!"

For an imperishable instant we stood together back to back, with Holden's fleshy face smirking down at us.

I turned abruptly, and she was in my arms.

"Where did you go?" she sobbed, running her fingers over my face. "Oh, my sweet, what happened?"

"Ants," I faltered. "They—"

**M**Y SPEECH congealed. Around the totem pole an ominous black torrent was pouring. Even as I stared it swirled up about the five-headed post in overlapping waves, enveloping Mona's carven face and filling the fragment with a gnawing as of termites amuck.

Hideously, Dawson's face crumbled, and my own became a dust-flecked symbol of corruption. From the summit of the pole, Holden was staring down in slack-jawed dismay, his wooden eyeballs protruding.

"Ants," he mumbled. "'Tittle black ants. Whattayaknow. Ants."

Ferocious driver ants were running in and out of my carven eyesockets, and filling my mouth with squirming maggots and pupacases when the wave converged in front of the pole, and started across the fragment toward us.

"George," Mona pleaded hoarsely, cringing back against me. "Visualize something from your childhood again. A dream—anything. Your childhood memories are deep, and vivid."

Her features twitched.

"Unless—George, did you bring those ants in here with you? You could do that, you

know. The human mind derives a perverse pleasure from torturing itself. Winslow explained it to me.

"He said Dawson's animals wouldn't follow us unless you wanted them to. They'd stay inside Dawson's imagination, where the vegetation is lush and food abundant. They'd stay within ear-shot of the dinner bell."

My blood ran cold. The shock of realizing that I could no longer control my own thoughts was almost more than I could bear. For the first time, it dawned on me that I had an unsuspected capacity for—yes, giving myself the works.

All that was sane and civilized in me was revolted by the perverse pleasure which my subconscious mind derived from gruesome and terrifying images. I knew that there were sunlit vistas in my conscious mind, structures of crystalline loveliness, towering edifices of mathematical beauty—breathtaking in design.

But what kind of background would such images make for us? Would they imprison us utterly? Would I find myself walled up in a complicated mathematical maze, staring at Mona through transparent but ice-hard walls—separated from her by the sides of a cubo-octahedron?

The thought was intolerable, and I shied away from it with all my strength. Shutting my eyes, I clasped Mona firmly and visualized—

Machines! It occurred to me that I could do that. I could visualize machines. From childhood, machines had always fascinated me—huge and complicated machines, humming, pulsing, throbbing, pounding—machines, machines.

I could visualize gigantic wheels turning, dynamos humming, drills and magnetic gauges bobbing up and down.

There was a smell of lubricating oil in my nostrils, a thunderous roar in my ears when I opened my eyes and stared dazedly about me.

"George, don't move!" Mona screamed. "Stay where you are. Oh, George, what have you done?"

Looking down, my brain swam. Directly beneath us there yawned a stupendous chasm, its almost perpendicular walls studded with blasted and blackened granite outcroppings.

We were standing on one of the widest of these, but its width wasn't comforting because a sixty-foot magnetic excavator was moving swiftly toward us, chipping it away in fragments.

"George, stand back! It's throwing up rocks as big as hen's eggs."

Even as she spoke, there was a splintering crash, and the shelf shuddered from the impact of a bulleting granite fragment. All down the slope beneath us, enormous drills were chipping away the walls of the cavern, moving faster than I had ever imagined a machine could move.

The ponderous, clattering instruments seemed to possess a life of their own. They stood straight out from the rock, as though, hovering behind them, were invisible giants with an insensate urge to get things done.

The gorge was so deep it seemed bottomless. There was a purple glimmering far beneath me which may have been a river. Something that looked like the alkali-bleached antlers of an enormous stag was lying on one of the ledges, a hundred feet further down.

Before I could shake off my dizziness, the excavator thundered nearer, demolishing the ledge in voracious gulps.

"Down, Mona!" I shouted. "Not back—down. Flatten yourself out."

Lying flat on our stomachs with our heads raised, we watched the excavator eat its way crunchingly toward us. My palms were wet and Mona was sobbing hysterically.

"I don't want to die," she moaned. "I love you, and I don't want to die."

WITH terrifying rumblings the excavator ground closer, disintegrating the ledge in great chunks. The remnant which supported us began to sag, and chips of stone splintered against the cliff wall behind us. Closer it came, and closer, closer, closer, its vast, mechanical face dripping with lubricants, its clashing jaws exuding greediness.

I had thrown one arm about Mona's shoulder, and was trying desperately to visualize a modified tetragonal scalenohedron—a figure with crisscrossing internal surfaces and no barriers between—when the crunch of shoes on gravel shattered the image to fragments. "It's Winslow," Mona almost sobbed. "Winslow darling. Winslow—"

He came striding toward us along what was left of the outcropping, his shoulders thrown back. The change in him was breathtaking. There was a nerve-shattering concentration of power in his faceless gaze, and a kind of—yes, nobility, seemed to emanate from him.

He was clothed in a soft-textured tunic, belted at the waist, and there were rainbow-hued sandals on his feet. Under his

arm was a small, metal box, perfectly square and surmounted by a glowing crystal tube—a sort of pipette.

He spoke in measured tones, but his voice seemed to come from an immense height, and his manner was that of a man with an unruly child on his hands while an adult task called for his attention elsewhere.

"Try to keep calm," he said. "When you think of me, you agitate the vortex. Unfortunately, disrupting it isn't going to be what you would call child's play."

I scarcely heard him. I was staring beyond him at the excavator. The roaring had subsided, and the powerful machine had ceased to munch. It hung suspended in mid-air, perfectly motionless, its serrated jaws agape.

"You visualized this chasm just in time," Winslow said. "See that bleached skeleton down there? Before I could follow you a herd of water buffalos stampeded."

"The ants sent them thundering past in a cloud of dust. They would have flattened you out inside your own imagination if those machines hadn't cut the ground from under them."

I stared at him aghast.

"Then we're still in Dawson's land?"

Winslow nodded.

"Your scientific imagination has superimposed a truly remarkable vision of the future on Dawson's Africa. We're in Dawson's land ten thousand years from now. The animals have whitened to skeletons, and huge, intelligent machines are carving the continent up to suit themselves."

He seemed to increase in height.

"I may as well tell you about myself," he said. "I just pretended to be Winslow. I didn't come out of your mind. I came from—well, call it another universe."

"Your conceptions of time and space are still very rudimentary, but from your point of view it would be partly true to say I came from the Great Nebula in Andromeda, folded back upon itself and turned inside out."

"You came from—"

"The Great Nebula. Or, if you prefer, a universe which impinges on the closed system which you are accustomed to think of as the physical universe, but is actually outside it. I came in a dimension-traveler, and placed the vortex by the bar in Charlie's place."

His missing face seemed to tighten.

"In my world I'm what you would call an experimental physicist. We knew what a unified field could do in our universe, but

we wanted to test one out in yours. That's why I put a negation-mask on my face and pretended to be one of your mental images.

"You thought about the real Winslow, but you couldn't visualize a headless man moving about on his feet. The real Winslow just couldn't rise up in your mind."

He was staring at me steadily.

"I blotted out his prone image when I masked my face and stepped into his shoes. Seeing my face might have tightened you up mentally, and I wanted you to give your imagination free rein. Testing out an abstract imagination under the influence of the vortex field was an opportunity I couldn't afford to pass up."

He tapped the metal box.

"Now I must get back to my world. I've got to disrupt the vortex, you understand? With your cooperation, this apparatus will do it. The unified field makes all cerebral chain reactions come to life, as you would say. Chain reactions when you think are as real as your physical body, but—evanescent, attenuated in structure. The field solidifies them, freezes them."

He nodded.

"No time for definitions, you understand? No time to discuss what is real, solid, substantial in your world and what isn't. A unified field makes everything substantial by fusing entropic variants of matter-energy."

"But—"

"Matter-energy is hardly an accurate term, but it will have to suffice. Call it universe stuff, if you prefer—the warp and woof of reality. It's very difficult to explain, because your knowledge is so limited. But—well, the unified field is a sort of filter."

"It dissolves the kinks in matter-energy by draining away the distortions of entropy. The kinks are very important from your point of view. Without them, you might turn around and meet yourself yesterday, or spend the rest of your life with your toes pointing in the wrong direction."

"Holy cats!" I choked.

"Unfortunately my present task is more complex than any mechanical process with which you are familiar. But you might say that I'm de-electrolyzing the vortex, disrupting it in segments. This apparatus is somewhat similar to a lead container immersed in a calorimeter."

Mona's hand had gone cold in my clasp.

"George, if he disrupts the vortex you'll never see me again. You can take me with you. Darling, fight him, show him you have a mind of your own!"

"You're giving him the wrong advice," Winslow said coldly. "You're not going to lose him. He's thought about you so intensely that you've taken on weight and substance."

"When the vortex goes, you'll be standing by the bar in Charlie's place. I'll squeeze you out, but you'll have to help me. You'll have to calm him down. All violent thoughts agitate the vortex, and I'm trying to keep it quiescent."

"I'm going to show you my face now. If you concentrate on my face your thoughts won't go shooting off in all directions. Just keep thinking about nothing at all, and let me do the worrying."

The gray opacity above his broad shoulders seemed to brighten and expand. It glowed and then pinwheeled, throwing off little quivering blobs of light. Faster and faster it revolved while a giddiness swept over me.

**I**T WAS a strange sort of giddiness, for one part of my mind remained calm and detached and utterly unaffected by the gyrations of that molten wheel. One part of my mind felt drowsy and relaxed, and yet a little hard lump of excitement seemed to be glowing in the depths of my consciousness.

Gradually, from the spinning wheel, there emerged a huge, shadowy head. Amidst the molten drip, drip, drip, it slowly coalesced, and assumed familiar contours.

It was not a human head. On ancient Egyptian mummy cases there are badly drawn donkeys which some Egyptologists insist are jerboas, and others okapis. Staring awestruck at Winslow's great head, I knew that the ancient Egyptians hadn't just imagined the most bellicose of their gods.

Yet the Warrior, by the Greeks called Typhon, had been—

"Yes," Winslow said, nodding. "We made a test flight to the Valley of the Nile once. The Egyptians defied us. They thought we were animal-headed gods. But look closely. My face is not really donkeylike."

It was true, yet of course.

Winslow's face was not that of an animal.

"Look into my eyes," he urged soothingly. "Into my eyes. That's it. Deeply—deeply—sleep—that's it—deeply—deep—sleep—into my eyes—"

"Holy smokes!" Holden yelled, upsetting his rocked-in-the-keg. On my feet, so help me. George, did you thump me?"

Drowsily, I blinked sleep from my eyes. Not donkeylike—of course not—it was soft-

textured, mobile, and it expressed Winslow's thoughts even more eloquently than a human countenance could have done. "George, snap out of it, will you? Hey, this is crazy. I passed out standing up. Twenty years I've been practicing, and never once—"

Someone was tugging at my sleeve.

"George, George, oh, darling, wake up. We're outside. We're in Charlie's place."

I opened my eyes wide.

Dawson was down at the end of the bar, slumped forward on his elbows over a tall one. I remember thinking that he must have finished that drink two days before. Then, suddenly, it started. It all started coming back so fast I felt like a cork in a tea kettle.

She was right beside me plucking at my sleeve. Her eyes were moist, and she was trying to kiss me. Although I wanted her to, I kept pushing back against the bar.

"Darling, he kept his word. He squeezed me out along with you."

"I don't know yet how I kept from bursting a blood vessel in my brain. But gradually the bobbing up and down feeling subsided, and the confusion went out of me."

We were all there together in Charlie's place—not counting the bartender. Dawson and Holden, and Mona Colbin, and the News-Gazette's ace fotog were back.

"Darling," Mona exclaimed. "You'll have to get me a job. I could handle a society column, I think. Could you maybe take it up with the skipper?"

I told her no. Grabbing her about the waist I lifted her into the air until she was lips-high and a little over.

"I've something better in mind," I told her, lowering her again until her mouth was flush with my own.

"You mean—"

"Sure, a home and kids. "But you've got to forget that you were ever a Hollywood star."

"Huh?" Holden mumbled. "Hollywood star? Hey, that's an idea. Let's go back to the morgue and run off one of those hotsy-totsy ancient cinema films. We're never goin' to find out what happened to Dawson, anyway. I feel it in my bones."

Far down the bar Dawson raised bleary eyes.

"My own animals," he muttered. "They came for me. My own animals came for me. My own animals—"

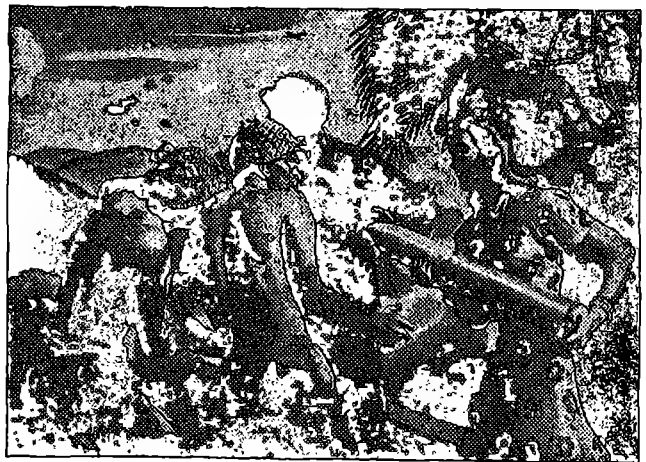
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Kurt Langer saw Magda reaching for him as fast as the gravity of Mongrovia would permit

# MONGROVIAN CARAVAN

By RICHARD TOOKER

*On a Far-Off Planet, Kurt Langer Strives Against Fearful Odds for a Cargo of Precious Lunite—and a Woman's Love!*

**T**HE lusty bass voice of oxygen-suited Gimp Halley reached Kurt Langer's ears through the tiny radio receiver inside the glass-eyed globe of his helmet.

"All clear ahead! Give 'em the light."

Langer looked dubiously down the long, jagged incline of alien black rocks, between steep, knife-edged ridges.

"Okay," he answered without conviction. "Here we go! Look out for trouble where that gulch cuts in about halfway down. Those stick-men will be dying of thirst for

Terran blood after that last pasting we gave 'em."

One armored hand flicked the lever-control of the black light unit suspended under the oxygen tank from Kurt Langer's belt. The invisible rays shone back at the photo-electric "eye" of the leading tank-like carrier behind him. Instantly, the ten caterpillar-treaded vehicles moved forward and down the rocky slope. The carrier's sensitive tracks adjusted themselves automatically to inequalities of surface. Those of the ten, not receiving



enough of the rays from Langer's back-belt unit, were led by relayed beam from the one just ahead of them in the train. They followed the black light beam like so many well trained pack-horses.

All ten of the carriers were loaded to capacity with the precious, heavier-than-mercury lunite, gleaned from rare and guarded deposits on the huge second planet of the Alpha Centauri system. Mongrovia, they'd named the world, after Norden Mongrove, the great explorer of the 21st century.

Electro-magnetic telescoping had vastly revised earthman's lens-measured estimates of space distances while arthile, the powerful and controllable rocket-explosive had given him meteor wings. The two had made possible the flight to the nearest star system in little more than a year. Two years of a space-man's life for a round trip, if he survived.

Langer looked back, turning slowly, burdened not only by his oxygen suit, but by the ponderous gravity of the planet. A conscientious boss of his pogies, as the space-men called the latest in pack-trains, he saw an almost human individuality in the compact, little "tanks" that to the casual observer would look precisely alike.

A young veteran of stellar venture like Kurt Langer, found each pogie bore scars and dents that were sentimental mementoes. Moreover, a pogie had internal peculiarities that gave it personality. Variations in the delicate, but heavily armored, mechanisms accounted for this. They were robot machines, with more than canine intelligence.

**L**ANGER muttered as the lead carrier negotiated the end of a black boulder, streaked with gleaming crystal. He grinned as the lead pogie toppled perilously, then with a human-like lurch, caused by the shifting of the gyroscopic balancers, regained equilibrium.

One hand poised to cut the black light switch if necessary to avoid an accident, Langer watched his robot packers negotiate the offending boulder, one by one. Next to the last were over, rolling on sturdily, before a mishap threatened.

"It would have to be you, Lordamighty," Langer murmured as the pogie hesitated, hummed loudly, jerked, and then with an odd variation in the self-adjusting units, sidled around the boulder like a huge turtle, instead of climbing over.

Gimp Halley's sudden warning brought Langer to a halt again. He switched off the

pogie-control, the train stopping simultaneously tipped up at apparently perilous angles. Some of them, their gyroscope stabilizers prevented their falling.

"I don't like it, skipper." Halley's radioed voice vibrated with concern. As navigator for Kurt Langer's freighter rocketeer Minute, Gimp Halley took his duties super-seriously. Scouting for the savage stick-men near the lunite deposits was out of his line. But Gimp Halley never complained of duty.

"Can you really see any?" Langer transmitted. His belt dial was on zero for all close communications by radio. His lean, sharply-chiseled face, nested in the huge helmet, looked a trifle pinched and effeminate, although Langer wasn't in the least.

On the contrary, Kurt Langer was wiry, quick of physique, brain balanced and actually surpassed the ox-like hugeness of his navigator.

"You're too darn big and slow for a space-man, Gimp," Langer had told his man once with a disarming frankness, "but you're honest and loyal. I can depend on you. That's worth a lot out where the unexpected always happens!"

"I think you're right about that gulch," Gimp Halley acknowledged now. "Wait till I see for sure."

He moved on with the slow, draggy pace that was about all an earth-man could manage against the terrific load of Mongrovia gravity, compounded by oxygen paraphernalia, not to mention the extra-armored suits required to protect them from the stick-men's puncturing darts.

All around them, as Kurt waited intently, the uneroded hills of Mongrovia rose up forbiddingly, under an atmosphere so thin that humans could not survive in it. Above, a reddish sky weltered down, presided over by the two majestic orbs of the Alpha Centauri binary. At vast distances the stars would seem as one. Three daylight moons were visible, actually sister planets of Mongrovia.

Kurt Langer felt a stinging reaction to the scene as he fingered the small, camera-like machine-gun which hung about his neck on a slender, metal cord. A nostalgia, too, for far-away Terra that was akin to the dread space sickness. He was lonely for a certain pair of blue eyes.

For the first time in days, weeks, months of strain he felt weak and futile against the endless obstacles of the infinite. He had to recall stoically the motive for his being here to stiffen his will, fight off the nausea and numbness of rationed oxygen.

"You can't really see those sticks against that black and crystal rock," Halley radioed back, anxiously. "Sometimes I see a hundred and then I think I'm seeing things."

"You'll be seeing things all right whichever way it is," Langer answered, waiting methodically.

They had killed a hundred or more of the "sticks" in two brushes with them since loading the last pogie at a lunite deposit. But the Mongrovians propagated like ants and were just as tenacious and persistent in the battle for survival. The more they killed, the more gathered to attack from far and near.

These tall, spectral creatures resembled giant walking-stick insects. Dull, lead-colored bodies blended well with backgrounds. Small, pointed heads, bearing huge eye clusters on either side, made them look like men, though their posture standing was but half erect. Earth scientists had studied them with scant results beyond empirical observations. They learned what, but not why.

The "sticks" were man-like in their use of a slightly mechanical weapon, the throwing or sling-stick. They aided one another gregariously and apparently had means of communicating with each other.

They lived in the myriad crevices of the planet on a microscopic amount of water, and fed apparently almost solely on the deposits of lunite, which they defended from the inroads of the Terrans with the blind fury of maddened hornets.

**I**T WAS apparent that the sticks were not affected by the gravity of their native planet as earthmen were. They were many times as strong and active for their weight on Mongrovia as a Terran. One of many forms of life revealed by stellar discovery, they defied final analysis by human five-sensed intelligence.

Gimp Halley's machine-gun now began chattering its faintly audible death song. Langer fired a burst at a faintly discernible movement above him in the rocks. The thin atmosphere carried only a little of the ripping explosive sound waves. Rocks blew into dust-like fragments, as two stick-men vanished.

"Hold it," Langer directed. "We haven't any rolls to waste. Wait till you can get 'em in a row, Gimp."

Faintly audible from the gored and tumbled ridges above them, indicating that the gulch wasn't the only danger zone, their mechanical "ears" detected the excited, code-like

clickings or stridulations by which the stick-men of Mongrovia were believed to communicate.

"Ek, ek . . . ek, ek, ek. . ."

A moment more, the earthans waited, listening, when Halley called suddenly, "Look-out, here they come!"

A chorus of piercing shrieks, incredibly high-pitched, and the dark rocks seemed flowing down upon them in a squirming mass that sprouted skeletal arms, legs and bulbed heads. A hail of glittering missiles rained down on them, some sticking a moment in the woven metal of the oxygen-suit armor.

Langer did not wince or try to dodge. He and Halley shuttered their deadly "cameras" in twin arcs that left a perfect circle of annihilation. Little heaps of fragments formed about them, bits of the stick-men that had escaped "dusting."

"That'll hold 'em a bit," Langer said with satisfaction. "It will take an hour for another bunch like that to come in."

The eerie ek, ek, ek of the sticks that still survived in the rock crannies higher up reached their ears faintly. "A lot of business we've got murdering them for taking their grub," Gimp Halley muttered.

Kurt Langer grinned as he heard the faint transmission on Halley's zero adjustment.

"Don't worry, Gimp, we're the ducks this time, and they've already had some pot shots at us. Get busy and look for punctures."

The steel-hard darts thrown with surprising force by the stick-men, by means of rods about four feet long, were a natural phenomenon of the surface formations on Mongrovia. The darts appeared in fields like volcanic spicules. Most of them did not even adhere to the armor-textured oxygen suits. But others, sharper, harder-thrown, penetrated the leak-proof inner lining of the suits.

Still all would be well if the dart did not chance to have a hollow point, as some did.

The hollow point prevented the leakproof lining from healing the hole completely, and precious oxygen began to leak out under pressure of the tanks.

What was still worse, in case of a puncture, it was very difficult to locate it without removing the oxygen-suit. This could not be done in Mongrovia atmosphere. Time was of the essence, too, of a gauntlet-running for a cargo of lunite. No one could waste valuable oxygen while looking for dart tips that were like needles in haystacks.

"I wonder if those devils know that their darts are the worst enemy we have on Mon-

grovia," Gimp Halley grumbled.

"It sometimes looks as if they did," Kurt Langer replied. "But if they're so smart, why don't they pick all hollow-point darts, or all darts whose points will break off so we can't find 'em?"

"I guess they're just good by accident," Halley rumbled. "Like me, when I am good at anything."

A slight dizziness caused by the oxygen variation of his tank mixture set wings to Kurt Langer's fancy. Magda Bashen, nurse-medico, would be waiting when, and if, he returned from this trip.

Langer doubted if he'd have started the pilgrimage to the space-man's Mecca at his tender age of twenty-six if it hadn't been for Magda and smoke getting in his eyes. He could see her now even more clearly, it seemed, than on that last day almost a year ago.

"I could never marry a space-man who hadn't tried for a cargo of lunite from Mongrovia," she had said, hotly.

"You wouldn't marry one who tried and failed," Langer had replied. "They don't come back if they fail. It's one in ten or so by the last figures, isn't it? Who's out now?"

"One in ten come back, Kurt, but it's worth it, and if you want to know who's out now you can look at the register the same as I. A cargo of lunite will save a thousand lives on earth. It's the greatest curative discovered anywhere, any time."

"I know, Magda," Langer had continued. "I've always planned to make my try naturally, but I'm young yet. They usually do it at about thirty-five, and the Minute's a small ship for that flight."

"You want me first," she taunted. "After that I can be a widow any time."

Slow to rile, Kurt Langer burned a long time when lit. He had leaped up furiously, "That's enough, girl! I'm leaving for Mongrovia tomorrow at noon, if my crew will stick for that trip. If they don't, well, I'll get another crew."

"And I'm going with you," Magda announced serenely.

"Don't make me laugh," he had slammed out angrily.

**K**URT LANGER, had burned all the way to the hangar of his rocketeer the Minute. This was the ship he had saved so long to buy for his very own to go adventuring off the better known skyways of the void. Magda would probably

marry Lon Wilks if he didn't come back.

She had liked Lon a lot before she met him. Not that Magda Bashen couldn't have any man she wanted. Brains and buxomness were combined in Magda. She was considered one of the best nurse-medicos of the day, at a time when women were leading men a shade as all-around doctors. But she had a penchant for space-men, especially space-men who brought back the precious lunite from Mongrovia.

Old Art Delos, his engineer, had been secretly longing for his chance at Mongrovia before he was retired. Gimp Halley's wish had ever been one with his skipper's. They had trimmed off for projection at noon the next day, having fueled for two years to be spent in the void. Magda had come just before they left with that silly idea of going with him.

"I've always intended to go, Kurt," she said. "I've been promised the two year absence by the hospital faculty for a long time and now I've earned it."

"No," he'd turned her down rather cavalierly, "you can't buy yourself off like that. Anyway, you're needed here as much as a cargo of lunite. If I don't come back, good luck, Mrs. Wilks!"

That had cooked her. She had hurled something like, "I'll go anyway and you'll be sorry!" at him, and stalked off with her chin in the air like the queen she would always be in his heart.

"Guess I've got a puncture I can't find," Gimp's radioed report brought Kurt back to the present with a jolt. "I'm using oxy a sight too fast for my peace of mind."

Kurt Langer lumbered up and studied Halley's gauge. They didn't have time to look very long for punctures. "You've got enough oxy to last if you ride a pogie the rest of the way back to the Minute," Langer said. "As soon as you begin to feel faint I'll unload one for you."

"The same as letting a couple of hundred people die back home," Halley replied, ruefully. "That lunite is worth more than my carcass any day."

"Not if we lost all of it," Langer announced flatly. "Anyhow, I'd unload the whole darn train right here before I'd leave you to die."

Halley's huge, bulbous form seemed to stiffen at its living core as he tramped off heavily ahead of the pogie train. "Come on," he growled, "I'm okay."

The wormlike line of pogies surged forward obediently as Kurt Langer flicked the

black, light-switch guide on again. The armor of the pogies was too thick to be penetrated by darts. A rear guard was unnecessary with the helmet rear view mirrors to see that no adequate number of stick-men tipped one over.

What accounted for most of the disasters on Mongrovia, provided a ship survived the meteor belts and other perils of the twelve-month projection, were the cursed darts of the stick-men. With their long, sectional arms, these creatures could manipulate a throwing stick like a sling, loosing the missile at the instant of greatest initial velocity.

This was done by means of a cunningly fashioned trip that defied clear analysis by Terran science. After the darts were fended off or spent, if the camera guns failed to stop all the stick-men, those same throwing sticks became murderous spears to gouge holes in the oxygen suits and end another expedition in tragedy.

It was usually finis when the stick-men attacked in sufficient numbers to break through the explosive bullet defense. Ammunition drums ran out, and oxygen tanks could not fill themselves. Always one must be limited in supplies on such expeditions. Every move on Mongrovia was an effort for a Terran. It took more oxygen to get around. It took more of everything, especially courage.

Space-men who started on the "pilgrimage" to Mongrovia expected to die. It was a sort of space-man's Valhalla. Those who went there were consecrated to the cause of relief for human suffering, which had grown more serious a problem as Earthmen grew older in evolution, developed neuroses unsuspected in the earlier epochs.

Mongrovia lunite had become a tradition, and the space-man who died before his attempt to bring back a cargo of lunite was like a Christian dying unbaptized.

"Delos calling, Delos calling."

It was the quarter hour signal for the routine broadcast from the Minute for report and check-up. The Minute lay, after her perilous landing, about five miles away. It might as well have been fifty in that gravity and over such riven terrain.

"Okay, Art," Kurt Langer dialed the Minute. "Gimp seems to have a puncture, but he's still up. If he goes down, I'll unload a pogie for him and he'll have enough to keep him alive without exertion until we get back to you."

"Everything jake here," Delos transmitted. "Lot of sticks around, but I can handle 'em with the batteries."

"I wish we had your armor," Kurt said and dialed back to zero. He could now be contacted only by a code signal from the Minute.

**Y**OUNG Kurt Langer considered again how his luck had been neither good nor bad in landing on Mongrovia near a lunite deposit big enough to fill his cargo hold to capacity. He just hadn't been too far from several small deposits quickly located by specially constructed detectors. Most of the one-in-tenners who survived the expedition had made a lucky landing very near a deposit. They told their grandchildren about it. Others on the other hand, searched for a despairing length of time, with oxygen dwindling. The space-man who returned alive and luniteless might better have tied a rocket around his neck and shot himself sunward.

The brand of Cain would be upon him. Cruising Mongrovia in a rocketeer, looking for lunite from above, was out of the question. Barely enough fuel could be carried to fight out of that gravity after one landing on it.

Ek, ek, ek! The sticks were at it again, their numbers thickening as they rallied for another attack from the rock crevices above. Gimp Halley had stumbled and swayed. He could barely raise his feet.

"Better take the count," Kurt radioed.

A gurgle responded from Halley's helmet as he went down to his knees, tried to rise, then collapsed on his face. Mongrovia gravity got a man quick when his oxy content thinned a bit. Kurt Langer stopped the pogies and walked up to Halley. The gauge showed barely enough for survival-pressure without exertion. Through the helmet window, his face glowed up, ruddy, round, beaded with sweat, eyes agonized, mouth open, panting.

Langer checked the oxygen suit briefly. No break visible. Only stretched on the repair rack on board the Minute could they hope to find the tiny hollow point, or points, that prevented the leakproof lining from closing.

Kurt Langer flashed his black light beam and brought up the pogies. Ten pogie loads of lunite would beat a twenty year record, and he wanted all there was in this. But even nine loads would rank him with the three top men.

A few twirls of a combination lock in the round top, and the leading carrier opened like a huge beetle spreading its wings. In-

side, a pale greenish mass, thick as cold honey, filled a handled container. Langer heaved the weighty load out and dumped it at the side of the trail. An excited ek,ek, ek sounded from the rocks above at this jettisoning of priceless provender for the stick-men.

Gimp Halley was able to help himself into the hollow back of the pogie, before collapsing with a muffled crash. His machine gun perched on his chest, he could help if he could keep awake.

Langer gave the pogies the light and shuffled on doggedly.

Like a file of monster snails they reached the end of the canyon-like formation. Here a massive wall of red-black rock confronted them. Langer gritted his teeth as he saw that they must almost parallel the way they had come for a long distance. The terrain of Mongrovia certainly furnished a stern ally for the stick-men!

They toiled up along a shelf-like escarpment. Weird pinnacles of rock and solid ore veins towered over them like the colonnades of some ancient temple. Swarming along always, the stick-men voiced their code-like plaint as they massed for another attack. Kurt hoped he could blast them off without Gimp's help. If they ever closed in with those spear-headed dart hurlers—

The ruins of a dozen pogies from some over-ambitious venture loomed before them. Though the planet was strewn with such remains, it was mere chance that one blundered onto the wrecks, so vast this far off world was. Langer swallowed a thickness in his throat as he glanced at the mangled remnants of three oxy suits. The pogies had been battered almost to scrap metal. The sticks could not solve the combinations to the locked cargos of lunite, but they could exert a terrific violence and persistence.

A great bluish disc edged over the crimson face of one of Alpha Centauri's suns. The twin of the binary was setting in a murky haze. The reddish cast prevailing, deepened. Across the sky, wavering streamers of corona found their astral way. When the one sun was down, the other eclipsed. Then the brief and semi-Mongrovia night would be upon them. It couldn't make much difference.

Kurt Langer fought a dizzy spell grimly. Earth and Magda had never seemed farther away. Only the quarter hour call of Art Delos assured him of one fragile link still existing between him and life and love and home. He radioed that Gimp was riding pogie-back, and cautioned his engineer

against attempting any wild breaks for a rescue. Delos' job was to keep the Minute clear of sticks.

"One more thing," Delos reported last. "I've scoped a rocketeer that looks about an hour away. She's heading in for a landing the way it looks."

"Another pilgrim, maybe," Kurt chuckled. "I hope they don't hit it any hotter than we did. Give them a flare unless you think they're hijackers. We don't want to furnish any lunite glory for some of the yellow slickers in the business."

**A**NOTHER attack of stick-men from three sides, kept Langer busy. Halley did not revive enough to help. Two of the sticks reached Langer with their deadly throwing stick points. He mashed one's head with a blow of his fist and knocked the other off its feet with a sweeping upward kick of his heavy boot. He sank down resting after the struggle, before he beamed the pogies again and plodded on, praying that he had developed no punctures.

The Minute's signal buzzed at his ear.

"Ship overhead looks doubtful, skipper. They don't answer my signals."

Kurt adjusted the scope attachment on the inside of his helmet panel, swept the sky briefly. Faintly, he discerned the deceleration fan of a rocketeer. From where he stood it looked like a tiny comet of pale blue.

"Don't call them, Art," he directed, sharply. "We can't involve them, even if they're friends. They're on their own here on Mongrovia, same as we are!"

The connection blurred off. A grim set of figures kept pounding through Kurt's head—one in ten—ten to one. Ten chances in a hundred he would win.

"You asked for it, Magda," his lips formed. "I suppose you're sorry now even if I'm not! You were right. A space-man should try it young. It takes youth to lick Mongrovia. Most of 'em wait too long!"

His head cleared with a chilling shock of surprise.

"Kurt, is that you and Gimp down there about three miles from a rocketeer?" the radio ear was rendering. "I'm scoping you from about ten miles and coming down fast. We shed a braking tube in the meteor belt. It nearly stripped us."

Great rockets! Was he getting delirious or something?

Magda Bashen radioing from ten miles up!

He turned up the oxygen content a bit to sharpen his senses and looked up through his scope eyes. Against the red sky a braking flare with a piece out of it stood out like a wing of blue flame.

"Magda!" Kurt Langer whirled his belt-dial frantically for transmission connection.

"Magda—Kurt calling."

"I hear you, Kurt," the girl's voice answered.

"If that's you in the flesh, don't try to ride your ship to a landing down here with a missing tube. You'll never make it! It's rougher than a Martian glacier down here. And you can't bail out in this air without a resister. Got one?"

"No!" Her voice seemed harsh. "Only three resisters left for the four of us. Outside work to save the rest of our tubes lost us one resister, exhausted the extra. Never mind me, I asked for this, you know. I'll not let any one give me their resister and sacrifice himself, you know that, too."

"Say, whose ship are you on, for cripes sake!"

"Lon Wilks' Jinx. Oh, I told you I was going and why. You don't know 21st century women, not nurse-medicos' anyway."

Icy fire stole through Langer's veins. He hadn't really thought her so serious. Naturally, Wilks would take this chance to beat his time with Magda. Now they'd crack up, and Magda would be caught in the wreck, unless Wilks could persuade her to use the third resister.

He'd order the crew to bail out, but Magda was super-cargo and not under orders. If Wilks used the third resister, leaving girl and ship to their fate, then he wasn't the space-man that Kurt Langer had known him to be!

Kurt Langer looked around, trying to make a swift estimate of just how bad the landing might be with a missing braker. Even the stick-men became interested in the new landing. He took this chance to report what was up to Art Delos, and beamed the pogies forward again. His attention was now divided between picking a barely passable route to the Minute and observing Lon Wilks' battle with Mongrovia gravity.

Langer could almost hear the Jinx's skipper imploring Magda to use the third resister. She'd be telling Wilks she could take it. He'd come right back, "I can go down with you then. It's my ship. Besides, I'm tough on these emergency bumps. I know how to kedge flutter. I may set her down easy enough so we can walk away from it."

The Jinx was blasting down into a roughly circular hollow just below the shelf rock that Langer followed with the pogie train. Not so much jagged stuff down there, but still rough enough. Magda's voice crackled in his helmet ear.

"We're going to try that hole below you, Kurt. Lon won't bail out. The crew will be ordered out with resisters any minute. They're good guys, Kurt. Rusty Welch and Big Anders. They don't want to leave us but it's orders. Be good to them, Well, happy landings, Kurt. Sorry for it all. Just want you to know I never intended that you should go alone without me, young as you are. It was easy for us to follow you only six hours behind."

WHAT if she and Wilks were only hurt? How could he ever get them to the Minute alive in this gravity, with the stick-men harrying them? He stopped the pogies and looked up to see the Jinx's safety port open and two bloated oxygen suits drop out, both firing resister pistols to brake their falls on giant Monrovia. They didn't bother to open chutes in such tenuous air.

"That's Welch and Anders," Langer muttered and promptly forgot about them as he watched the emergency landing with increasing admiration for the artful kedge flutter off setting the blown tube at the critical altitude. The Jinx was blooming with steely blue, shot with orange fire. Coming down over every ounce of resistance remaining in her tubes. She could have made it anywhere except on Mongrovia.

Nothing any one could do, absolutely nothing! Teeth locked, Kurt saw rocks and rocketeer come together. The muffled concussion reached him largely through ground vibration. Landing guards stove in, the port rocket barrels were twisted in their massive bases, otherwise, not too bad.

Langer cursed the gravity. He dared not leave the pogies too long with Gimp Halley in an oxygen sleep. He started out hesitantly, stopped at a radio call near by. Blessed luck! The two-man crew of the Jinx had made a safe landing.

"Hey, one of you fellows, watch my pogies and navigator, while I get to that wreck. We've got to get them out of there if they're alive. The hot tubes may blow her tanks any minute."

One of the Jinx men saluted and stayed while the other hobbled after Kurt Langer.

The port door of the Jinx banged open, hammered from within to force through a

jammed casing. Langer couldn't tell at first who tumbled out heavily. Not until he glimpsed light brown hair in the helmet panel as he struggled nearer. It was Magda.

"Get him out, Kurt," she was radioing faintly an instant later. "Get him out before the ship blows up!"

Wilks was huddled under the shock-spring jackets in his oxygen suit. He did not answer radio. Yet his lips moved, eyes opened a little.

Langer knew he could never drag Wilks up the tipped deck to the port door that was alone in the clear. He seized a loading winch above, slung it out of the idle-slot, pressed the automat button. It worked! The winch hummed around into position. He hooked Wilks' belt ring to the adjustable cable in its roller eye, then the power did the rest.

As he rolled the Jinx skipper out the port door, he said, "I hate to handle you like that, Lon, but it's rough or nothing on Mongrovia."

Outside, the hot tubes were smudging. Langer wavered. They needed any extra oxygen and could use the pogies that might be intact in the cargo hold.

"Get away from that ship!" Magda was shrieking, while the man from the Jinx dragged his skipper away in the direction of the pogie train on the shelf above.

Langer backed away groggily. A jolting blast from the wreck knocked him on his way back generously. He came to slowly, Magda bending over him.

"If those tanks hadn't been nearly drained, we wouldn't be here," he heard her saying.

"We needed that oxygen," Kurt Langer mumbled.

"If there was any!" Magda snapped, then hastened pleadingly, "We've got to get Lon up to the train."

"And unload another carrier of lunite," Kurt added, bidding farewell to his hopes for fourth place in cargo records. He wondered if Magda had changed her mind after the long voyage with Lon Wilks. Well, Wilks had the stuff all right. Without him Magda would be only a good looking dead girl, utterly useless.

He dismissed it from his mind as he called the man at the pogie train. "Bring down Dugo, I mean pogie Number Two, so we can load your skipper."

The stick-men had recollected their obligations to homeland and honey pot and were beginning to heave a spurt or two of darts. Their grape-bunch heads were popping up

and down in the clefts and pot-hole craters. Langer gave them a blast well scattered, that calmed them down. On the move again, excruciatingly slow, there was one less pogie-load of lunite, one more load of man.

"There's your lunite, Nurse-Medico Bashen," Langer radioed and tested the alarmingly low contents of his oxy tank. The rescue had cost him plenty.

"Eight loads of lovely green lunite, heavier than lead. We'll play Santa Claus yet to the lungers on Terra. That is, if somebody shares their oxy with me," he finished. "I haven't enough left to make the Minute, even with good luck, on pogie-back."

"Kurt," Magda answered after a moment. "I'm short of oxy. We all are off the Jinx. There were no extra drums left when we landed."

"You mean—" But what was the use asking? He could see it all. That fight to save the tubes in space had burned up their oxygen.

**THE** USKY purple glow stole about the crawling pogie train. The second sun of the binary had disappeared in total eclipse with the blue planet. Long streamers of crimson corona waved across the sky from the rims of the superimposing sphere. A phantasmic aurora. In a few hours, the eclipse would pass, then day again.

"Langer—Wilks talking—" the zero transmitted voice of the Jinx skipper was weak but distinct.

"Listening, space-man."

"I'm done for—matter of minutes. Take my oxygen—you need it."

Magda Bashen turned in alarm. "No, Lon, I'll let Kurt have my oxygen. I've been the cause of this so let me pay."

"She loves you, Lon Wilks," Langer insisted. "She's changed her mind about me. You can take the pogies in with your crew after I'm gone and claim the lunite as salvage. I'll stop here when my oxy peters out. Nice cemetery with lots of good company!"

"She's in love with both of us," Wilks' husky whisper was barely heard. "Take a look at your man up front in the lead pogie. I think he's dead!"

Knifing fear slashed at Langer's breast as he stopped the pogies, lumbered over to the slumped form of Gimp Halley, cupped by the carrier bed. He glanced at the oxy gauge. The feeder needle was oscillating and indicated breathing. Halley was evidently doing all right.

"He's okay, Wilks," Kurt Langer reported.



As he turned from the lead pogie he saw Magda reaching for him as fast as Mongrovia permitted.

"Kurt," she whispered, "Lon turned off his oxy tank when you went to look at Gimp. I'm afraid he's gone, hurt like he was!"

Magda's sob followed him as Kurt dived slowly to Number Two pogie. Wilks' face had relaxed under the helmet window. His tank had been turned off. The feeder needle indicated no breathing. They had no time for attempts at resuscitation. Lon's lips seemed to shape a faint, "so long—good luck. . ."

"Lon Wilks, you're a brave man," Langer said, huskily. "You'll not be buried on Mongrovia for all the lunite in creation!" Swiftly he attached the valves that would suck Wilks' oxygen into his own depleted tank. It might be barely enough.

It took two more pogies for Magda and Rusty Welch when their tanks reached the danger point. Six pogie loads of lunite left, and two men on their feet.

"It's also ran on the records now," Langer muttered, "with only six loads left."

"Also ran on the cargo records," Magda murmured sleepily, "but first in my heart now."

The rumble of the Minute's batteries welcomed them back to comparative safety. A massed charge of the sticks was being successfully repulsed by Art Delos. They shot their way through the desperate sticks without a casualty of their own. The freight port open, they ran the pogies up the ramp with their cargoes of life—and death—from Mongrovia.

Revived by adequate oxygen, they blasted off through the purple glow of the half-night on the return to Terra. Magda said from the hollow of Langer's arm, as they lounged in the pilot chairs before the windowed ravishment of an alien sky.

"I did love Lon, Kurt. I learned to on the voyage here, to be with you. He was right—I loved both of you, and I don't see how I could have turned down either. Which means as long as you both lived it would be without me."

"I knew I was lucky," Kurt Langer said solemnly as he thought of Lon Wilks' sacrifice.

## HEADLINERS IN THE NEXT ISSUE

WHEN one man, armed with genius and an idealistic desire to improve the lot of his fellows, enters into a big-scale interplanetary partnership with the most mercenary financier on Earth, there can be only one result—a bitter personal struggle in which the orbits of thousands of lesser men get hopelessly entangled. Such a struggle, set against a stirring background of pioneering on Venus, is the basis of Arthur K. Barnes' suspenseful *FOG OVER VENUS*, the complete novel featured in the next issue.

\* \* \* \* \*

ODDITIES in the heavens—and when the Big Dipper and other stars long known to mankind take a sudden and inexplicable jaunt across the night skies something odd is certainly at work—are the focus of attention in Fred Brown's hilarious *PI IN THE SKY*, a novelet which gives its readers an ingenious, side-splitting picture of what can happen any day when an advertising-mad soap tycoon really takes the bit in his teeth, only to be ultimately foiled by an absent-minded scientist.

\* \* \* \* \*

NEWEST winner of our Amateur Story Contest is Fox B. Holden, whose *STOP, THIEF* will appear among the short stories of the next issue. In *STOP, THIEF*, Private Holden gets in enough trouble to whiten the hair of a sub-deb elephant by trying to disprove the old theory about a shortest line, etc. Definitely a story whose warp is worse than its woof!

\* \* \* \* \*

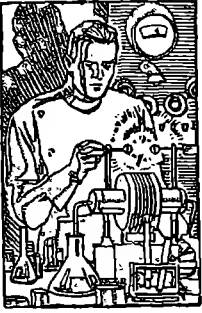
DON'T fail to read every word of the other short stories the issue will contain, as the science-fiction crop is in full harvest. *TWS* takes pride in the stories it runs, demanding that its shorts keep fully abreast of the long lead novels and novelets in both story and science-fiction caliber.

\* \* \* \* \*

ELSEWHERE in the issue, you will find Sergeant Saturn with his quarterly free-for-all, *THE READER SPEAKS*, in which no holds or laughs are barred. In the same department, of course, will be news and announcements presented for those interested in *THE AMATEUR STORY CONTEST* and in *THE SCIENCE-FICTION LEAGUE*, as well as another glimpse into the *TWS* future.

\* \* \* \* \*

READERS of *TWS* will find still more to interest them in the science features headed by the perennials, *SCIENTIFACTS* and *THE WONDERS OF WAR* as well as articles keeping them abreast of the newest in scientific trends. Please write in to Sergeant Saturn and let him know how you like them.



# WONDERS OF WAR

## The Role of Science in Combat on All Fronts



### **BAZOOKAS WITH WINGS USED BY AAF—**

Army ordnance rockets, known as "flying bazookas," are increasing the striking power of AAF fighter planes in the Far East. The rockets, discharged from tubes under the wings, are being used in conjunction with depth charges for attacks on shipping and submarines, and with bombs for ground targets.

Stationary targets such as buildings and warehouses can be hit by firing the rockets one at a time. One AAF pilot set five Jap warehouses afire in six tries. For moving targets, pilots usually let go all rockets at once, thus practically insuring a hit. The launching tubes in no way interfere with normal combat missions where no rockets are used.

○

### **SIMPLE RANGE FINDER FOR GUNNERS—Lieutenant Commanders G. B. Linderman, Jr., and D. L. Hibbard, USN, have produced a simple and compact range finder for gunners using tracer ammunition against their target. It consists of two optical prisms with their oblique faces together to form an approximate cube.**

The upper surface, made opaque by silvering, has two sighting rings. The lower is ground to a spherical surface, also silvered, to have a magnifying effect. The oblique reflecting surface of the prism reflects the image of the two sighting rings to the gunner's eye. At the same time, he is able to look straight through the device, using the sighting rings on the oncoming plane or other target.

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○

### **ARMY WEASEL UNBOtherED BY SNOW, MUD OR TREACHEROUS GROUND—The "Weasel," a new Army vehicle for tough terrain, carries three passengers, can climb a 45-degree incline and turn in a 12-foot radius. Looking like a cross between a jeep and a tank, Cargo Carrier M-29 can remain on top of and secure footing in soft, porous ground in which more conventional cars or tanks would bog down.**

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○

### **COOLING SLOT THROUGH PLANE WING—An interesting new plane patent has been issued to Robert J. Woods of Grand Island, New York, and assigned to him by the Bell Aircraft Corporation. This patent is on a slot that goes entirely through the airplane wing from leading to trailing edge and on the flap that opens and closes it.**

This radically-cut slot has, as one primary objective, the carrying of a cooling air blast to the plane's power plant. It promises to be particularly useful on the Airacobra, where the engine is placed in back of the pilot, necessitating cooling effects well back of the nose.

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○

### **NEW RECOIL DEVICE FOR LIGHT ARTILLERY—**

Another invention given royalty-free to the government is that of William Summerbell of Washington, D. C., and Richard H. Mason of Havre de Grace, Maryland, on a recoil-absorbing apparatus especially adapted for use on small-caliber automatic anti-aircraft cannon.

The barrel of the gun is surrounded, near the breech, with a helical spring that takes up most of the backward thrust of the recoil and also serves to check the return motion into firing position. There is, in addition, a buffer cylinder beneath the barrel which absorbs much of the jar.

○

### **GARAND PATENTS NEW GUN HAMMER—**

John C. Garand, inventor of the M-1 semi-automatic rifle, has developed a new hammer for firearms. The hammer is thrust forward by a plunger impelled by a strong coil spring. Just short of contact with the firing pin, a smaller auxiliary plunger imparts a slight bias to the blow, preventing the cartridge primer from blowing the pin backwards, with resulting wear and tear on the lock mechanism.

As in the case of his other inventions, Mr. Garand has assigned rights in his new patent royalty-free to the government.

○

### **FLYING BULLDOZER FOR RAPID MOVEMENT—**

E. W. Austin of Cedar Rapids, Iowa, has come up with something that puts flying elephants to shame—he has invented a flying bulldozer! The machine itself, so vital for quick development or repair of wartime landing areas, is suspended beneath the plane and equipped with removable floats, enabling it to light on water.

Once it has crawled ashore, a take-off from the plane's rear-placed engine supplies power for the tractor treads.

○

### **MOLOTOV FRUIT JAR—A hand-flung bomb of the "Molotov cocktail" type has been patented recently by A. P. Prather and Ralph Russell, both of Georgetown, Kentucky. Container for the incendiary fluid is an ordinary screw-top fruit jar.**

Secured to the cap is a handle, within which a smaller container is placed so as to discharge a smaller amount of gasoline over a cloth or paper cover when the user is ready to fling his blazing missile. A friction igniter, controlled by a thumb strap, is placed at one end to set fire to the cover just before throwing.



"Hello, Toots," said Tubby. "Meet the Professor and Angelina.

# THE GADGET GIRL

By RAY CUMMINGS

*Tubby and the Professor Rush Through Space to Rescue a Damsel in Distress and Meet a Lady with a Melting Glance!*

**T**HE lecture hall was almost full. "There's three in the first row," Tubby said. "Come on, let's grab 'em."

With Jake and Pete close after him, Tubby shoved his way down the aisle. He wedged his fat little body into one of the three chairs that fronted the small raised platform.

"Swell seats," he whispered. "Lecture on thought waves. Sure ought to give us

plenty to think about. Am I right?"

"Education is wonderful," Jake agreed.

"Sure gives you plenty to think about," Pete declared with awe.

The little platform was indeed awe inspiring. The lecturer had not yet appeared, but all his scientific gadgets were here mounted on three tables. There were mysterious looking rows of tubes, like the tubes of a radio; a big

globe of thin glass with what looked like a shiny little metal weather-vane mounted inside; a snaky tangled mass of small glass tubing, like a scrambled unlighted neon sign; a gruesome helmet with electrodes that suggested the death chair at Sing Sing.

Tubby squirmed in his seat as he gazed at the helmet. Front row seats could have disadvantages at an affair like this.

"If he wants to make a test on us," he whispered, "you try it, Jake. Your thoughts sure are—"

Tubby's suggestion was lost in a stir from the audience as a woman appeared on the platform. She was evidently the lecturer's assistant. Quietly she moved among the apparatus, inspecting it, adjusting it here and there.

"Sure knows her business," Jake murmured. "Brains and scientific knowledge—that's unusual."

**S**HE looked it. She was maybe fifty—tall, skinny and hatchet-faced. Tubby stared at her with repugnance while she calmly switched a current into the tangled mass of tubing so that it glowed and bubbled with purple fluorescence.

His attention wandered to a fluffy young girl sitting across the aisle. Cute little dish with dimples and curves. Tubby nudged Jake.

"Take a look," he whispered. "If I was this lecturer I sure could pick me an assistant like—that."

A ripple of applause burst from the audience as the slim, slightly bald, middle-aged lecturer appeared. The hatchet-faced female stood quietly to one side, alert to do his bidding.

"Ladies and gentlemen," the lecturer began when the applause had subsided, "in presenting to you tonight this remarkable series of experiments with thought waves, I must explain to you our modern conception of what, scientifically, a thought actually is. As perhaps you know, about thirty or forty years ago Sir William Crookes, the inventor of the Crookes' fluorescent tube, forerunner of all our Neon signs—"

The lecturer made a gesture towards

his apparatus.

"Sir William Crookes," he went on, "was the first to recognize that thought actually is a vibration—a tangible thing."

This lecturer evidently believed in getting to the meat of the business at once. Tubby braced himself for a swift absorption of meaty scientific knowledge.

"And now," the lecturer said, "it is a demonstrable fact that thought is an electric impulse—a definite, tangible impulse of electric charge sent out by the brain. An impulse of infinitely tiny, infinitely rapid vibration of the ether. A little wave of immense velocity, with the brain its sending station. And thus, another brain at some distant point, if properly attuned, is capable of receiving those thought waves. We call that thought transference; telepathy."

Meaty stuff. With his feet swinging clear of the floor, Tubby sat soaking up the intricate data. Presently he was aware of a twitch at his coat sleeve. Turning, he saw there was a man beside him in the aisle.

"Lemme alone," Tubby murmured indignantly. "I'm listenin' to the lecture. It's important."

"I'm important, too," the man retorted. He was a tall, thin, stringy-looking man in baggy black clothes. His gray-white hair was spread in scraggly strands over his bald spot. His sunken cheeks were like wrinkled brown parchment. His voice was a hoarse, urgent whisper.

Tubby was startled.

"What do you want?" he demanded.

"I need help. Someone to help me. Someone who understands this thought science. The minute I saw you I knew you were the man. Please, come with me, just for a few minutes. My woman, my thought-girl, needs me and I've got to get to her at once."

A girl? A girl who needed help? That certainly was important.

"Where is she?" Tubby whispered. Before he realized it, he was out of his seat and the stranger was urging him along the dim aisle toward a side exit

door. "Where is she?" Tubby demanded again. "She's a good looker? How do we get to her?"

"I knew you'd help me." Immense gratitude was in the man's hoarse voice. "I could see you would, by the kindly look on your face. And the intelligence. But we must hurry."

**I**T WAS obvious that they couldn't talk details when they were hurrying along this way.

Outside the lecture hall the dim street was almost deserted. The stranger's bony hand clutched Tubby's arm with a trembling grip.

"You're all excited," Tubby said. "Take it easy, don't be scared. Where we going?"

"To my laboratory. It isn't far, just around the corner. You see, I'm a thought-professor. That lecturer you were listening to tonight is just a beginner, a theatrical trickster. I'm Professor Ponder. I was the first, the very first, to discover that thought actually is a tangible, scientific thing. I've delved into the science of thought waves very deeply. And now I've got the apparatus all finished—just today."

"That's fine," Tubby said. "Pleased to meet you, Professor. I'm Tubby. You need my help. Am I right?"

"Of course you're right. I wouldn't dare make the trip alone."

"And your girl's in trouble and we gotta get to her in a hurry to help her. Right? Is she a good looker?"

The last question seemed to strike at the Professor with all the importance it had Tubby. They were just entering a dark hallway of a shabby brownstone lodging house. At a big wooden door the Professor turned and stared down at Tubby.

"She's the most beautiful of all women who live," he said hoarsely. In the dimness his sunken eyes were gleaming. "Or ever have lived, or ever will live. How could she help but be? I created her. With my thoughts I fashioned her into everything most noble of glorious womanhood. And now, she exists out there. I've seen her. I saw her this afternoon,

just for the minute I had my image-grid working. But I can't leave her forever in the oblivion of the thought-realm. Her eyes pleaded with me to come and get her. So I'm going. That's where we're going, you and I, right now."

Meaty stuff. Tubby gulped.

"Where did you say we were going, Professor?" he asked.

They had entered the Professor's laboratory room. It was a big, shabby, room, littered with weird scientific apparatus. Tubby could see at once that this was the real McCoy, not like the cheap theatrical gadgets on that lecture platform. On the floor here there was a black glass screen, with coiled wires hanging from it. The glass of the screen was broken, with the black wires of its mesh holding it partly together.

**T**HE Professor noticed Tubby's rueful gaze.

"I broke it," he acknowledged. "When I saw her out there in the thought-realm I got excited and knocked it on the floor. And now it can never show her to me again."

"But if we're going to her, what difference?" Tubby said. "Am I right? Professor, listen, what's this thought-realm business? You gotta tell me."

"Yes. Yes, of course I have." The Professor was across the room, pulling out some apparatus with shaking hands. He was terribly excited.

"I hate to take the time now for details," he said, "but I must, of course. The thought-realm is the storehouse of all human thought. A realm of a different vibration-rate from ours here. A different state of being, but equally real. A coexisting realm—oh, dear, we're wasting so much time, and this is so elementary."

"You can talk while you work," Tubby suggested. "Get that apparatus ready, but don't get so excited. The more haste the less speed. Am I right?"

"Yes. Yes, that's right," agreed the Professor. "This is my transition mechanism. Two of them, one for you and one for me. They'll change the vibration-rate of our bodies, building an

aura around us—that's my electromagnetite field—so that our clothes and personal belongings close to our bodies also undergo the change. It will be a progressive change of our state of being, until we ourselves exist in the other realm. It's all so elementary—in principle, I mean, because it took real genius to devise my apparatus to make the physical transition practical. I hardly need explain this, to you especially."

"Right," Tubby agreed. "I'm up on stuff like this. This thought-realm place where your girl's trapped—that's the fourth dimension."

"Or the fifth, or the sixth or seventh," the Professor said. "Those are only arbitrary terms meaning a different dimension from ours. Here, you put this head-gear on, and run these wires down to your wrists and ankles. Fasten the belt. You take this one, it's bigger."

The thing was made of some extraordinarily light metal. It was easy to adjust, and Tubby had it on in a moment. It wasn't particularly bothersome.

"Swell," he said. "We're about ready, Professor. Your girl, she knows we're coming? Why is she in such a rush? She's been out there a long time already."

"All her existence," the Professor agreed. "Out there, buried in oblivion, with only me thinking of her. Here's the battery box. Fasten it to your belt."

They had just completed their preparations when a drastic thought occurred to Tubby. A girl as beautiful as that, all dimples and curves and everything—she couldn't be out there in that other realm without the people there noticing her. When the Professor had seen her on his image-grid this afternoon her eyes had pleaded with him. A look of anguished appeal? Of course! Because she was frightened! Because some dirty villain was after her, and the Professor and Tubby would have to come in a hurry.

**HE** TOLD the Professor his deductions. They were so logical you couldn't help but realize they were true.

But it was an error to tell them to the Professor. It threw the poor man into a panic.

"Oh dear, you're right, of course," he moaned. "Hurry, let's get started. Just slide that little switch on your belt buckle. We must start together and always keep together."

The terrified Professor was trembling. Tubby took the situation in hand.

"Hadn't we better sit down?" he suggested. "The shock of starting might leave us dizzy."

"Oh yes—yes, of course," agreed the Professor. "I forgot that."

They sat down on the board floor, side by side.

"Now," Tubby said. "I'll count three. Here we go—one! Two! Three—"

He slid the little switch. Things happened so instantly that his voice intoning the word *three* seemed to get lost in the chaos. This thought-wave transition certainly began with speed.

Tubby had a vision of the laboratory walls dissolving into nothingness. The impression was blurred a little because his head gave a wild lurch and everything inside him seemed turning over. The shock of it knocked him on his back. For a minute he lay dazed, with the Professor clutching at him.

"Oh my goodness—I didn't realize it would be quite so swift as this." The Professor's frightened voice was a weird, moaning blur. It seemed to come from very far away. But it didn't of course, because the Professor was right here.

"Okay, take it easy, hold everything," Tubby muttered. Somebody had to be in control here, and the Professor certainly had gone to pieces. "We're okay, Professor. Don't get excited."

In a manner of speaking, they still were okay. Tubby couldn't feel any pain anywhere. In fact he couldn't feel much of anything except the Professor's shaking grip. The floor under them was gone. Everything was gone, so that they seemed like two blobs without any weight, floating in emptiness. Tubby began to kick his legs violently, and in a minute he seemed to have himself in a

position what might be called sitting up, with the Professor huddling beside him.

The transition mechanisms were humming faintly. Tubby could feel the heat of the metal bands on his wrists and ankles, and the band of the helmet around his forehead. Looking down at his legs he could see he hadn't changed any, and the Professor looked and felt normal.

But everything else was just a gray empty abyss. It was obviously horribly big. Billions and billions of miles of emptiness under them, above them and to the sides. Much bigger than being out in Interplanetary Space, where at least the stars would give you something to hold onto. Here there was just nothing.

"Lucky we don't fall," Tubby said. "Looks awful far down there, eh, Professor?"

"Don't look down," the Professor moaned. "It's awful."

"Where are we?" Tubby demanded. "Brace up, Professor. Keep your mind on this. We don't want to make any errors."

The Professor pulled himself together.

"Actually we're all right," he declared. "Our bodies are changing their dimensions—a progressive change of vibratory character. A new state of being. We're incompatible now with our earth-world, and so we can no longer perceive it."

"All according to Hoyle," Tubby agreed. "Correct. And when we get to be like the thought-realm, then we'll be there. Say, these waves sure are speedy."

**T**HE flow of movement was obvious now. It was like being on a fast train, you couldn't exactly tell whether you were moving forward, or the scenery was coming toward you and passing at the sides. There was a sort of scenery here now, a gigantic swirling mist out in the abyss. Tubby stared at the mists. Up ahead, billions of miles away, the whirling shadows seemed to have some sort of shape.

"Look, Professor?" Tubby cried.

"Maybe that's it up there?"

The misty shadows were opening, spreading out sidewise, and closing in behind. All at once Tubby realized that he and the Professor were almost in amongst them. It was a terrible realization. If they hit anything at this speed it would be a nasty bump. A roof of gray blur was overhead now. A million miles overhead, but still it was there. To the sides the walls were like gigantic graystone caverns. A million big corridors were sweeping past. Tubby gazed into one. It went back a million miles, and seemed to branch out into a million other corridors.

This was certainly a big place. Everywhere you looked there were caves and tunnels. And there was a floor coming up underneath them now—a shadowy, undulating floor that spread out for millions of miles. It was sweeping backward so fast it was a blur.

"Hey, Professor, hadn't we better slow up?" Tubby suggested. "And how do we steer? How do we know where to look for your girl? There's quite a few places around here."

The Professor seemed to have his wits now.

"That will be a natural process and take care of itself," he said. "Our bodies will find their way into the proper vibratory channel. We will stay compatible always with our surroundings."

"Like a radio being tuned," Tubby said. "Am I right?"

"Yes, of course you are." The Professor's voice was admiring. "You always have a neat way of putting things, Tubby."

"Hitting the nail on the head," Tubby agreed. "Lookit! We seem to belong up this hill."

They went around a curve like a runaway roller coaster, and then they were speeding into a big ascending tunnel. Other tunnels criss-crossed it and branched out in every direction. It was like going through a monstrously big Mystic Maze, having no trouble at all choosing the right turning, and doing it all at headlong speed. Nature was certainly wonderful.



"Soon we shall be there," the Professor said with awe. "We're slowing now. One of these caverns must be ours."

His voice trembled with emotion. That was natural, heading toward his girl of such breath-taking beauty. She wasn't Tubby's girl, but still he could feel the emotion of it.

The gray rocky floor was sliding past fairly slowly now. Tubby shoved his legs down and realized that he and the Professor were walking. It wasn't exactly walking, though. It was more of a jolting run, like being shoved forward by a strong wind. It had Tubby out of breath in a minute. Then the wind eased and he and the Professor came abruptly to a halt.

"Well," Tubby panted. "Here we are."

He gazed around. Through the dim gray twilight he could see that they were in a huge cavern. It was just one of billions of caverns which they had passed, and it was enormous. Everywhere you looked gigantic tiers stretched like circular balconies, one on top of the other. And every balcony had million of shelves with millions of shadowy objects resting on them. Worse than that, everywhere Tubby looked he could see openings that led into other monstrous grottos, just like this one—billions of more tiers and shelves crowded with shadowy objects. Tubby had never seen anything like it.

It was certainly quite a big storehouse.

"Well, we're here," Tubby repeated. "I mean to say, where are we? Where's your girl, Perfessor?"

SCIENCE had quite evidently done its part, and the rest was now up to them. Tubby and the Professor stared around dubiously. There was no sign of life, and everything was silent as a tomb. Tubby was standing near a big shelf in a recess of the rocky wall. At first it seemed empty and then he could make out the ghostly outlines of things on it. Just the gossamer ghost-shape of a big machine. Under it was a neat, glowing little placard.

The Rocket  
Thought of by  
George Stephenson

The ghostly outlines of the quaint little locomotive with its big old-fashioned smoke-stack shimmered in the dim gray twilight.

"It was here for eons and eons," the Professor murmured with awe. "Then Stephenson thought of it and built it in the Earth-world. Now it's gone. This is just its memory."

Deep stuff, this thought-realm business. Tubby pondered it.

"Listen, Perfessor," he said, "that Stephenson feller got his locomotive out of here without coming up after it, didn't he? Couldn't you have gotten your girl out of here, without all this bother?"

"Ah no, that was just the trouble." The Professor warmed eagerly to the argument. "Stephenson had his basic materials in his earth-world. Everything that's ever been thought of, or ever will be thought of by humans is stored here in this realm. But with a living girl, you couldn't very well build—"

Tubby got the point at once.

"I get you, Perfessor. Then all the *people* that us humans have ever thought of, they just have to stay here—except that we've been able to come here and get your girl."

"Exactly," the Professor agreed.

Tubby stared again into the vast dead-gray silence around them.

"Funny, with so many people here, how quiet they're keeping themselves, eh Perfessor?"

But if the people were still not in evidence, the *things* which had been thought of, and were going to be thought of, were certainly here by the billions. A weird-looking little blob, with a shape that had no meaning at all, stood nearby. It was obviously solid and intact. It had a placard that read:

The Blintzer  
Thought of by  
William McGuire

"I guess McGuire's not been born

yet," Tubby suggested.

It was interesting stuff. One could get a lot of knowledge by poking around here. But it wasn't getting them to the Professor's girl. Tubby mentioned the fact.

"Maybe I've got to think of her harder," the Professor murmured. "You see, Tubby, my theory—"

Whatever his theory was, quite evidently it was pretty good, for suddenly from near at hand there was a sound. Tubby couldn't at first place where it was, or what it was. As the Professor stood with his face and forehead wrinkled into a knot, the sound got clearer. It was off to the left, a sort of faint gurgle. It was a girl's voice, gurgling with emotion, a gurgle of love. This girl, this most beautiful, glorious specimen of womanhood was gurgling with love because she was aware now that her lover had arrived.

It was thrilling.

"She knows you're here, Professor!" Tubby whispered. "Come on, let's go get her."

The Professor seemed instinctively to know the way. He started off at a trembling, shaky run, with Tubby after him.

"Brace up," Tubby murmured. "You gotta look romantic. First impression's important."

Tubby straightened his tie and smoothed his slick blond hair as he ran. They turned a corridor corner and burst into a dim gray cave room. A figure stood in the center of the room. The Professor's girl. She was his all right. A little placard on her bore the glowing words:

Thought of by  
Professor Ponder

Tubby stopped short at the cave's entrance, as though he had bumped into a wall.

"Oh my," he murmured.

**H**E HAD good reason to be startled. This was a girl, doubtless. And positively she was alive. She stood giggling as though her legs and spine were made of springs, and she was gurgling

and cooing as the Professor tremblingly approached her. The glowing twilight of the cave glinted on her weird figure. She was dressed in a square-cut jacket that looked like gray polished metal cloth and a short, gray metal skirt that stood out like a cone, her skinny waist coming out of its top. Her bony legs ended in wide, flat feet.

"Oh my darling," the Professor murmured.

He did his best to embrace her, but on her angular shoulders, at her waist and on her flat chest there were a lot of little gadgets that got in his way. Her shining square face had thick-lens spectacles on its nose. Her face was framed by dangling yellow curls, hair that looked like gleaming coiled wire. The curls jiggled and bounced and a loose end of one must have scratched his cheek as he tried to kiss her, because he let out a squeal of pain and drew away hastily.

But he was obviously thrilled. He stood trembling, gripping her hand, overcome by emotion.

"My darling," the female's voice cooed. "You came to me."

No accounting for taste, it seemed that she was as pleased with him as he was with her. For a moment they stood rapt with the sight of each other.

The Professor swung around to Tubby.

"You see?" he gasped. "Here she is. We've got her, the most noble, glorious, beautiful specimen of womanhood. You like her?"

Tubby gulped. But a gentleman is always a gentleman.

"Swell," he managed. "She's just grand, Professor. What are the wire curls for?"

"Ah," the Professor exclaimed with delight. "I knew you would appreciate her. Those are made of my springtite wire-alloy. Any coiffure can be arranged in a moment, and at no beauty-parlor expense. Show him, Angelina. The upswing hair-do—show him how easily you can fix it."

The polished, shining skin of Angelina's face crinkled into a gratified smile. At least she was like other females in being pleased, displaying her

good points. With nimble, prehensile fingers she bent and twisted the wire curls so that in a few seconds they were all standing upright like a little gleaming haystack on top of her head. It exposed her yawning, cup-shaped ears.

"Perfect," the Professor murmured. "I think I like that way best of all. Her hearing is even more acute, with the ears free of the hair. She has marvelous hearing and eyesight. See those double bifocals? And her complexion needs no cosmetics. Show him Angelina."

From one of the gadgets on her shoulders she took a bit of polishing cloth, rubbed her face and her long nose until they shone even more brightly.

"And no fragile hosiery," the Professor enthused. "I thought of all that. By virtue of my electronic color-absorption process the skin of her legs is chameleon-like. That's the nude shade she's wearing now. But if we want a deep beige, for instance for afternoon wear, to be ultra-fashionable—show him, Angelina."

Modestly, Angelina raised her flexible metal skirt a trifle. A gadget was around her skinny leg somewhat above the knee, like a garter with tiny electrodes buried in the skin. She pressed a switch-button on the garter and the skin of her legs at once turned a darker shade, mottled with a mesh-like design.

"You see?" the Professor exclaimed. "How simple and inexpensive! And how she can cook! Look at the thermite-grids there at her waist. She has a self-heating, automatic-turning grille—for a broiled steak, if we have a visitor with a big appetite, and a grille to boil my own arrowroot porridge. A most glorious woman, Tubby. Why, nobody in the world, not even you, could think of such a glorious specimen of womanhood."

**A** GENTLEMAN can be pushed only just so far, but what Tubby would have retorted was never revealed. From the shadows of the cave near at hand there came a sound. A warm, throbbing voice—a girl's voice calling a familiar greeting.

"Tubby, Tubby dear, how perfectly wonderful that you came to me, darling."

Luscious voice, lingering on the endearing words. Tubby's girl! With her long slinky skirt swishing about her sleek Nylon-clad ankles she came gliding from the shadows. It was a marvelous answer to the Professor's challenging question because she was certainly an eye-ful—fulsome curves in all the right places. A regular super duper girl. Not built along the lines of economical utility maybe, but she was certainly decorative.

"Why, hello, Toots," Tubby greeted. "I was just thinkin' of you. Meet the professor and Angelina."

Toots quite evidently was already acquainted with Angelina. Her penciled eyebrows went up and the Cupid's bow of her rouged lips twisted into a grimace of distaste. And through the thick lenses of Angelina's spectacles the Professor's wonder girl returned the look with equal asperity. They were both very dirty looks.

It was an awkward moment, but with neat skill Tubby jumped into the breach.

"Well, here we are," he exclaimed. "You girls are gonna go back with us. Right? Come on, Professor, let's get going. You can't ever tell when somebody—"

Too late! Behind them there was a bellow. In the cave entrance a towering, swaggering figure loomed—a huge, thickset man with flaring high boots and big rolling black mustache.

"So?" he roared. "Hah! I've got you all trapped. That's just what I planned."

The bellowing voice had a sneer in it, the very essence of villainous sneer. In his hand he had a long, leather quirt. He lashed it, snapped it so that the crack was like a little pistol report to punctuate his sneering words.

Toots gave a scream and swayed into Tubby's arms.

"Oh, Tubby, dear," she cried, "save me!"

The Professor stood trembling, with a squeal of excited terror.

The exotic perfume of Toots envel-

oped Tubby, and her soft warm arms were around his neck. It was a momentary handicap in doing battle with this villain. Tubby took just a moment off to kiss her. And then, as he was trying to get loose from her convulsive clutch, he saw Angelina.

The gadget-girl might have been frightened by the villain's sudden entrance, but certainly she didn't show it. Anger seemed her chiefest emotion. All of her was abruptly alive with jiggling, throbbing current. All her little thermite grids and gadgets were glowing luminous. From her eyes, through the double-lens spectacles, little lightnings of electronic anger were darting. Her gaze at the advancing villain was like a death-ray.

It had all happened in an instant. The lashing quirt was cracking as the villain strode confidently toward what he, of course, considered his helpless quartet of victims.

Suddenly the quaking Professor squealed:

"Angelina! Angelina—your spectacle adjustments, the gravity-intensification ray!"

**A**NGELINA got the idea instantly. Her nimble fingers darted to the thick metal rim of the spectacles, turning a tiny switch there. In a second the lightnings of her angry gaze deepened. Twin violet rays struck the villain in full force. It brought him to an abrupt halt. Rooted to the cave floor as though his feet were glued there, he stood swaying, roaring with baffled anger. But he could still lash his quirt. It crackled in a ten-foot circle around him, but it couldn't reach anything.

"Now quick, the automatic clothesline, Angie," the Professor prompted. "We've got him!"

From somewhere about Angelina a long length of clothesline came slithering out. In addition to her domestic talents she was evidently skilled in rodeo work. In a second she had the rope into a lariat-noose and was whirling it around her head. The spinning noose darted out, settled over the head of the

snarling villain.

"Well thrown, Angie!" the Professor squealed. "Now then, rope him up."

There was no doubt but what Angelina had everything under control. It shot a pang through Tubby. He was still trying to get loose from Toots' loving, frightened grip. He sensed that if he didn't do something more heroic than just stand here hugging her, Toots herself would be the first one to remind him of it. Desperately he flung her off.

"Hold everything!" he shouted. "I'll fix him, I've got him."

Angelina paid no attention. Methodically she was pulling on the tightened lariat and the villain had now fallen to the floor. Tubby gazed around wildly for some sort of weapon with which he could finish the affair up in speedy, efficient fashion. If only he had something like—

And then he saw it! There it was, standing only a few feet away in a recess of the cave wall, a little globular object.

A glowing placard under it read:

Essence of T.N.T. Super-Triple X  
Thought of by Tubby

Just the thing, and who had a better right to use it? With a bound he had rushed and seized it. Unerringly he flung it at the fallen villain's head. His aim was perfect. There was a snapping roar and a burst of light. It completely obliterated the man on the floor. It did more than that. It obliterated everything else, with such speedy efficiency that Tubby was only aware that the Professor, Angelina, Toots, himself and the cave were being splintered into fragments, very tiny fragments of nothingness. There was nothing left but a vast abyss of empty silence.

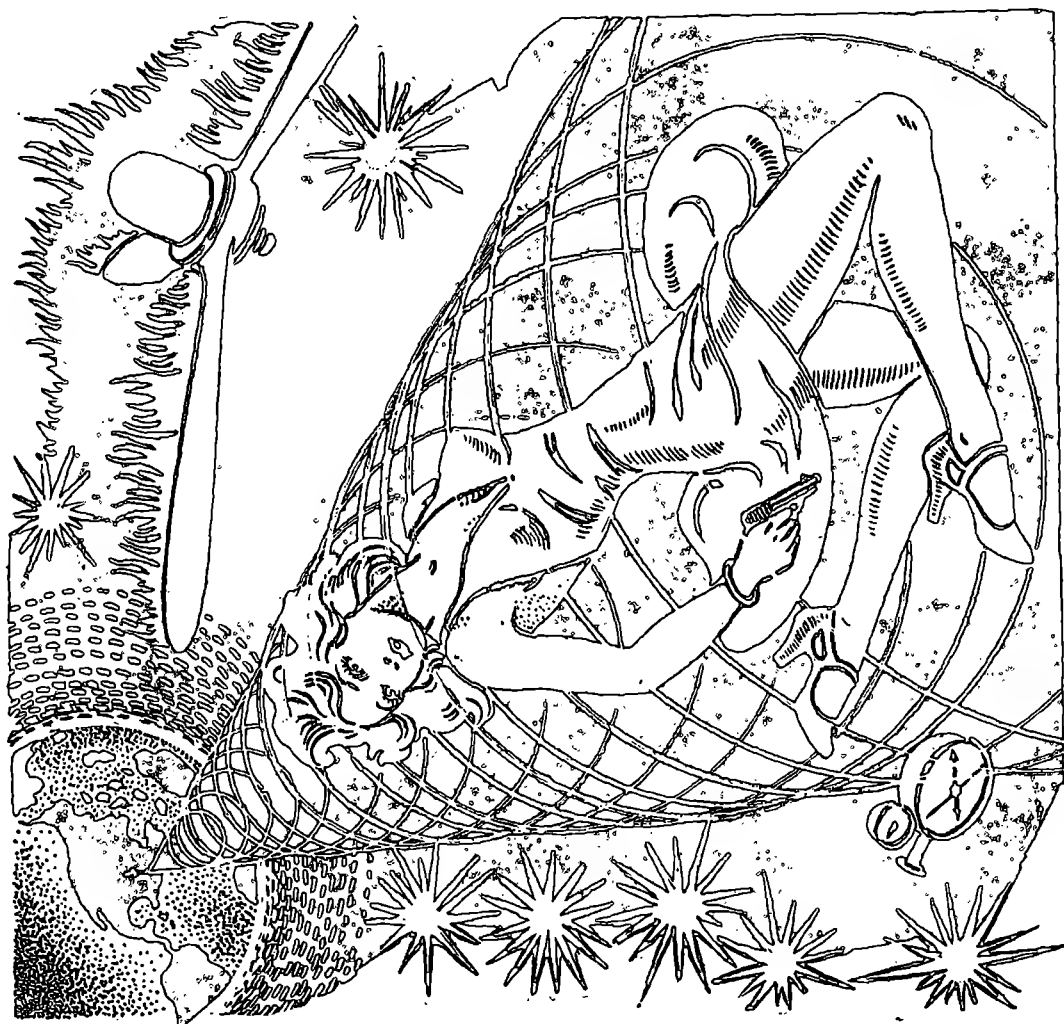
"No, not quite silence. From an immense distance out across the abyss, a blurred faint voice came floating.

"No mam, he's not been drinking, honest. Maybe he's got a fit or somethin'."

And another earnest voice:

"Seems like maybe he's got a fit or something."

(Concluded on page 112)



Suddenly the chorine was able to fathom all time, all space, and infinity

# THE ULTIMATE ANALYSIS

By JOHN RUSSELL FEARN

*Just as Ruthless Invaders from a Far-Off Cosmic Frontier Are Poised to Invade the Earth, Out of a Curious Experimental Machine Darts the Perfect Mathematical Equation, Loaded with Potential Destruction!*

THE two scientists were arguing vehemently. Not that this was anything new. For the forty years of their academic lives from the days when they had mixed odors of test tubes together in the college laboratory, they had argued. The point of significance was that Dr. Enrod was usually proven correct. He had greater vision but less brilliance than his friend Professor Coltham.

Right now they stood in the Professor's private laboratory, an isolated low-roofed building well separated from the house. Coltham, brooding like a bird of prey over his smaller friend, jabbed an acid-stained finger at him.

"Your trouble, Enrod, is limitation!" he asserted. "You have always been the same—always ready to pull my experiments to pieces."

"For which very reason you have improved them." Enrod smiled, and remained unabashed. "Nor am I limited. My imagination, but not my inventive faculty, completely transcends yours!"

"Hmmm. Maybe."

"No doubt of it. And I'm telling you right now, Coltham, that if you go on with this latest invention of yours you are likely to stir up a scientific hornet's nest!"

"Supposing I do? Have not men stirred up hornet's nests before when finding new paths in science? Frankly, I don't think you have grasped the essentials, Enrod."

Because he was so sure of the fact, Coltham started to elucidate again.

"Several years ago Jeans worked out the space-time-matter conception in relation to mathematics. He was practically alone in his theory in those days, fifty years ago—practically alone in his belief that everything is in reality a mathematical abstraction, that the build-up of atoms, protons, neutrons, and so forth are just so many mathematical computations, sponsored perhaps by some creator who is mathematical to an infinite degree. Right?"

"I know," Enrod observed mildly. "You have told me all that."

"But you don't seem to have grasped it! I said that for twenty years I have worked on this theory of Jeans'. What is more, I have proved that he was right. Jeans himself said, and we of today admit it freely, that it is no longer possible to assess Nature from the engineering or chemical standpoint. Mathematics alone can completely analyze the Universe and its myriad forces. We can only progress with any benefit by knowing the mathematical changes in a substance which cause it to be possessed of progressive entropy. Our Universe, because of the Theory of Relativity, is finite—and yet unbounded. It is finite because geometrics limit it. It is infinite when understood through mathematics. Separate the mathematics from the geometry and then—then we shall understand the Universe for what it really is!"

**E**NROD shook his head. "I do not agree even now," he insisted. "To get to the root of mathematics is like—like trying to catch the east wind in a bottle. It just isn't there. It's a mental conception."

"There you have it!" Coltham boomed. "A mental conception! The intricate workings of mathematics are planted deep in our subconscious minds. Jeans said that, too.

Because of this—because of our inability really to penetrate the subconscious mind—I have spent these years in devising a machine to do it for us, a machine which will analyze any known substance, organic or inorganic, down to the absolute mathematical basis."

Enrod shook his bald head impatiently. "You're still up a gum tree, Coltham! A mathematical formula can never tell us what a thing is—only how it behaves. It can only specify an object through its properties."

"If only the external mathematics of a thing—such as mass, width, depth, and so on—are analyzed, yes. But an absolute analysis can alone explain the mysteries of dimensions, the electron waves of probability, the Fitzgerald limit of light—endless things like that. If we have an exact analysis of everything that goes to make up the universe as we know it, a task which I reckon would take about ten years, we have also the key to infinity itself. The basic universe-forms needed are not numerous. Most of the things we know are off-shoots of an original formation—such as steel is a form of iron."

Enrod shrugged. "You intend to solve why things are? That it?"

Coltham pulled the mackintosh cover from an instrument standing in the center of the laboratory floor. It reminded Enrod of a huge glass pear, stem downward. Inside its near-vacuum were queerly fashioned filaments, electrodes, and banks of tubes. Round the bottom edge of the globe, where its neck began, was a complete row of gray objects like the hammers of a piano. They formed a circle around the globe neck, and each one was carefully wired to lead to a matrix immediately under the strange contrivance.

"Remarkable!" Enrod said, studying it. "Only a man of your brilliance could have invented such a thing!" Then as Coltham remained proud and silent, Enrod added naively, "What is it?"

"A mathematical analyzer. It is composed of what I call metallic variants. You see those teeth round the inside of the globe neck? They all look alike, yet each one is specially prepared on its external surface to receive light or energy photons from anything placed in the matrix beneath. There are thirty metallic variants, each one capable of a different task. They analyze, in turn the mathematical outflow of whatever is in the matrix. Radiation, energy, light—all those different conditions have a mathematical sense which so far has escaped detection.

Nothing on earth can be without some form of energy dissipation and, therefore, capable of analysis. Only in the absolute zero of space is it possible to find a body utterly at rest, and probably not even there.

"So, the metallic variants analyze the color, the mass, the height, the depth—everything—of whatever is in the matrix. This thirty-toned key system here"—Coltham indicated an array of tiny pipes of odd crystalline substance which looked like a baby organ—"responds to the metallic variants' vibrations and proceeds to perform the mathematical conceptions necessary to the analysis. From here the movement continues to what is really a glorified adding machine, sealed inside this massive box here. A result is finally arrived at—a one hundred percent analysis of anything. You see?"

"Partly," Enrod mused. "How is the key system able to convert vibration into mathematics?"

"That," Coltham sighed, "is nearly as hard to explain as east wind in a bottle. I don't just know how the vibrations are converted into mathematics. I only know it is so—just as we know that an electron is somewhere within a probability wave. I know from experiment that the crystalline used in the key system is sensitive to the vibrations of the variants. Maybe it is something inherent in the alloy I have used, something to do with the mathematical basis of the metal itself. Like many scientists, I understand what the alloy does but do not know what it is. However, suppose I demonstrate?"

He threw a switch and the globe came to life. The various tubes glowed. Then as Coltham pulled a pencil out of his pocket and tossed it into the queerly fashioned matrix, clamping down the lid, the globe really jumped into activity.

He and Enrod stood watching as mystic, unexplainable ripples of color started to play along the circle of metallic variants. Some of these saw-teeth shone vividly, others only glowed. The weird crystalline substance of the key system was shot through now with unholy light.

**ED**R. ENROD was convinced, as he watched, that some of the colors were not in the visible spectrum at all. He felt rather than saw them. A vague unease settled upon him. Little gusts of conception—fragments of amazing thoughts—twisted through his brain. Once he fancied he really understood the infinite calculus in its entirety

for the first time. Then just as quickly the breathtaking conviction was gone.

"You feel the mathematical vibrations?" Coltham asked dryly, eyeing him.

"Is that it?" Enrod surveyed the globe intently. "Yes—I feel them."

"But they're as vague as waves of probability," Coltham sighed. "Vibrations from which the very universe was fashioned, no doubt. It is so hard to understand the functions of pure mathematics. Ah! I believe we are ready!"

He studied a dial for a moment, then shut off the power. The main mathematical machine continued working. The subsidiary calculator clicked suddenly and thrust out a sheet of stiff paper into Coltham's waiting hand. He smiled triumphantly, but Enrod blinked as he peered at it.

"Great heavens, it even analyzes the composition of the graphite and the basic constituents of the timber used for the pencil! Coltham, do you realize what this brain-child of yours is doing? It roots out elements that are not even in our Periodic Table! Look here—it says there is a mathematical percentage of Element 85. That is one of our blanks, but where does it fit into a common pencil?"

Coltham shrugged. "What did I tell you? Somewhere in the graphite—among these multitudinous other elements that go to create graphite—is Element Eighty-five, at a percentage of seven-eighths. This, my doubting friend, is pure mathematical analysis! We see from this formula our common, or garden pencil, is made up of no fewer than seventy-five different elements! The graphite, timber, and paint are analyzed exactly into seventy-two elements, and the precise atomic formation and weight and mass of each is given." His eyes sparkled. "Now we see what a field is opened up. We might find it possible to go on analyzing down and down, to the end and the beginning of atomic energy itself—right into the microcosm—"

Coltham stopped, slightly astounded by the magnitude and depth of the thing he had plumbed. This was the first time he had given the machine a complete test. That it was successful there was no shadow of doubt.

"At least I am convinced now I am right," Enrod breathed. "I said before that you were playing with fire—and that was when I had only heard the theory. Since I have seen this thing in practice I—I tell you the device is dangerous! Suppose you were to

put radium in the matrix, or something highly complicated such as that? Think of the vast number of interlocked equations and mathematical variants this thing would form. It might even turn into a thinking machine all on its own!"

"Absurd," Coltham smiled. "This machine of mine is simply a vastly improved version of the mechanical brains in use in various universities today for solving difficult problems too abstruse for tired human minds to grapple with. A thinking machine! Rubbish! No thinking machine can be made by man."

"But in the case I am stating it wouldn't be made by man," Enrod cried. "If mathematical vibrations are the basic form of the universe, what is to prevent a complex mass from forming their own thoughts and playing the devil with our known laws?"

"Since you put it that way, nothing," Coltham admitted. He frowned, then laughed off a momentary twinge of anxiety. "I'm a scientist, not a pessimist," he said. "Your imagination is going to trip you up one day, my friend. Here—you try the device. Anything you like."

Enrod elected to analyze his cigarette case, and he thought a few things about the man that had sold it to him for solid gold when he saw the equational formula. Thereafter he forgot his cold calculating prescience in sheer interest.

In fact both men became fascinated. They analyzed glass, chromium, sand, soil—got dizzying results that ran into almost incomprehensible equations and deep mathematics.

"We're worse than two kids," Coltham exclaimed at last. He was flushed with triumph. "But at least we've got something no scientists ever got before. Here, I figure we ought to finish off with a chunk of common iron. After all, it's the commonest element of the universe, if not the basis of the universe itself. Let's see what it's really composed of."

**H**E tossed it into the matrix, closed the lid, and waited.

"Just what is the matrix made of?" Enrod asked, looking at it more closely.

"Tungsten alloy mainly, coated on the inside with my crystalline to facilitate the mathematical vibrations. Time's up!"

But this time there was no click from the calculator. And even when Coltham cut off the power the globe went on glowing steadily with some inner power of its own.

Coltham glanced uneasily at his friend and

opened the lid of the matrix. A start shook him. Enrod gazed too, and it required all of his common sense to believe it.

The chunk of iron had vanished completely! The matrix was empty.

Fanny Reardon, star leg attraction in Maybury's Cafe chorus, was massaging a silk stocking onto her shapely limb when the door of her dressing room opened abruptly. A man with dark eyes, well dressed, and with heavily brillantined hair, entered. He quickly locked the door behind him.

"You're a no class heel, Nick," Fanny observed pleasantly, continuing her dressing. "I know you ain't a gentleman, so I won't ask you why you didn't knock."

"Hush!"

Nick Blake came over to her and the urgency in his dark eyes made her glance at him in surprise.

"Well, what's steaming you up?" she asked. "You look as though the cops are right on your tail."

"They soon may be," he said, keeping his voice low. "I got him, Fanny—Spike Munro. He's deader than last night's kiss, and here's the turnover." He flashed a bundle of notes. "Fifty thousand!" he said eagerly. "Right out of his safe. Everything fixed, just like I told you it would be. I've planned it so that Boyd Amos will take the rap. We're getting out quick—to Florida!"

Fanny added more lipstick to her already heavily painted lips.

"And I get twenty-five thousand out of it?" she asked. "You had better keep to your bargain, Nick. Now you've told me this much I could tip the cops off in double-quick time."

"Everything to be as we fixed it," Nick Blake said earnestly. "We have fifty thousand between us and nothing to worry about—except getting married. The plane is all set to go from that field at the back of Logan's Auto Wrecking Dump. Meet me there in a half an hour. Now I've got to go. Remember—half an hour!"

He gripped her plump arm in farewell, then hurried over to the door. For a moment or two, after he had slipped out, Fanny Reardon sat before the mirror with its horseshoe of globes, looking at her attractive reflection.

"Twenty-five thousand and Nick, a murderer, for my ball-and-chain?" she mused, "or should I take fifty thousand and remain here to catch a better fish? And stay clear of a murder rap, too!" She fluffed her blonde hair daintily. "Mrs. Reardon's little girl wasn't born yesterday. No, sir. . . ."



On the seventh floor of the Barlow Building, Joseph Barlow faced his Board of Directors—every one of them hand-picked and most of them having said "Yes!" to the big fellow more times than they could remember.

"Gentlemen!" Barlow got to his feet, tall and commanding. "I called you together especially to hear the result of our plans for the Grayham Dam. As all of you know—or should know if you have kept abreast of politics—this Corporation of ours stands to receive a great impetus in building and constructional tenders if only I can become a Senator."

There was a general nodding of heads.

"I have always had to play second fiddle to 'Honest' Adam Grayham, as they call him. Were he out of the way there would be nothing to stop me." Barlow paused and cleared his throat. "To eliminate him in the usual way—by murder, if you want it plainly—would be too risky. There remains only one alternative, to discredit him. At last the chance is ours! As you are aware he has done a lot of political campaigning to get his bill passed authorizing the Grayham Dam project. Now he has managed it, and I have used my not inconsiderable influence to get the contract for it."

Barlow looked around the faces, then slammed his fist on the shiny table.

"Gentlemen, that dam will be built, but it will not stand up to what Grayham expects. It will, as well, smash, irrevocably and utterly, his reputation! We shall not be implicated. I have things too well planned for that. Only Grayham and his faulty engineering theories will be involved. Inevitably I will become Senator Joseph Barlow in his stead. In due course, my power will increase."

The big fellow smiled at the rosy speculations racing through his mind

**I**N HIS penthouse-de-luxe, atop a towering apartment building, J. Clayton Withers stood facing another man across a broad desk. Withers himself, six feet of prosperous well-being, with the face of a prize bulldog, was immaculate as usual. But the other man, his secretary, was not so well dressed. In fact, he had only one thing in common with his boss—he was angry.

"I am not going to do it, Mr. Withers!" he declared flatly. "I've never refused to obey orders before, but this time I have a personal reason. If you corner Amalgamated Copper, as you intend, hundreds of small-time investors are going to lose every

cent they've got—including my brother and several of my friends. No, I won't do it!"

J. Clayton Withers' eyes glinted in the fat encircling them.

"I cannot believe, Mason, that you are such an idiot as to prefer to go to jail just because you won't handle this negotiation in the usual way. For you will. I'll see to that!"

There was silence in the great room for a moment, the stock market tycoon grinning sardonically and Mason staring at him fixedly. At last Mason again shook his head firmly.

"No, sir, I won't do it. I am not going to encompass the ruin of innocent people. Get on with it yourself."

Withers reflected for a moment. Then, to Mason's surprise, he took an automatic from the desk drawer and leveled it.

"On second thought," he said slowly, "it will not suit my purpose to have you leave here. You can talk quite a lot before I get you clamped in jail. One word from you about Amalgamated Copper, and the game would be up. That being so I'm afraid our association has got to come to an end, rather abruptly. And, of course, I shall see to it that it is—suicide. . . ."

Ten thousand million miles away in space a cruiser of the void moved with easy velocity. For nearly three years now it had been pursuing its leisurely trip from the vast reaches near Alpha Centauri.

Within its monstrous, radiation-proofed depths was almost an entire city, complete with every need—strange needs indeed, for the denizens of the space cruiser were as unlike Earthlings as anything imaginable.

In appearance the travelers were insectile, with massive chitinous bodies and saucerlike faceted eyes. Only the delicate way in which they handled machinery gave the clue to the high reasoning power motivating them. Of them all, Dath Razor was the cleverest, a scientist infinitely superior to anything ever produced on Earth. What was more, Dath Razor believed in defeating the cruel edicts of Nature if there was any possible way to do it.

Behind, he and his fellows had left a world suddenly overtaken by a poisonous gas outflow from Alpha Centauri, their sun. There had barely been time for them to get away. Now it meant another world on which to live, a conquest by force if need be.

A faraway pinprick of reflected light, third planet from a C-type dwarf star, looked promising enough through their enormously powerful telescopes. It was, obviously, a

fresh and still youthful world, not very much unlike their own, and possessed, too, of an oxygen-hydrogen-nitrogen atmosphere. That was the thing. The life on it was not particularly advanced, could soon be destroyed.

Now that Dath Rasor came to inspect the little planet at this nearer distance he was clearly pleased. He spoke in his flutelike voice.

"Within a very short time, my friends, if we increase speed—possibly even before that distant world has even turned once more on its axis—we shall be within range of it. The animate life on it is very ordinary, composed apparently of hair-topped bipeds. Their greatest achievements, so far, seem to be television and air flight. They know nothing of bending space, of warping gravitation, of unlocking energy, all of which forces we can project from this cruiser. Within a few hours we can volatilize all the life there and prepare the place for our landing."

To Dath Rasor there did not seem to be anything ruthless about his plan. He regarded the life on distant Earth as a man might regard a horde of dangerous insects, as something to be stamped out in order to gain absolute security.

Dath Rasor's fellows glanced at each other with their huge eyes, nodded complacently, then looked back to the mirror. It was a lovely world, so young and promising, so worthy of the trivial expenditure of spacial energy necessary to feed the destructive projectors.

Soon, within hours perhaps, this eternal wearying journey through infinite space would be at an end.

**P**ROFESSOR COLTHAM took another stiff drink, poured out a second one for Enrod. Then they looked at each other over the empty glasses.

"You went too far." Enrod had been saying this for nearly an hour now. "I warned you, Coltham! The iron just couldn't vanish. It must have been transmuted into something else. It's—it's the law of Nature. Matter—energy. Energy—matter."

Coltham put his glass down rather unsteadily.

"I can't understand it," he muttered. "For over an hour now that machine has been working with the power off. I suppose we ought to take another look," he ventured. "Time's getting on, nearly twelve-thirty already. Come on! If we don't we'll be worrying all night. No use running away from science. Let's face it."

Resolute, thanks to the whisky, they returned to the laboratory for the third time since the iron had vanished. They stood wide-eyed and baffled. The matrix was still empty, but by now not only the globe but the entire machine was glowing weirdly. The metallic variants were flaming with inexplicable colors and vibrations, while the crystalline keys had become blurred, ethereal, in outline. It was as though part of the apparatus had veered into another dimension.

"What the devil's happened to it?" Enrod asked unsteadily—then all of a sudden he knew what had happened to it. It was as though somebody invisible started telling him, as though a superwisdomed being was pouring information into his dazed brain.

"It is because—" he started to say, but Coltham cut him short, clearly under the same influence. His pedantic voice boomed forth.

"Because we used basic iron! That's it! The machine did the very thing I conjectured—only I said it jestingly. It analyzed down to the edge of nothing. It analyzed the iron down and down into its final atomic, sub-atomic, sub-subatomic constituents, down into its eternally locked core. And because iron is the basic factor of the universe as we know it, the material universe anyway, the machine had there a mass of equations forming the basis of universe-stuff. I can't call it anything else."

Coltham drew a deep breath, appalled by the possibilities.

"Only one thing can come out of it—a new mathematical setup entirely! The iron has been converted into mathematics by the very mathematics which make it up, even as some elements are converted into a new element because they give off radiations which, when striking a catalyst, change them into the nature of the catalyst. A mathematical catalyst. What a discovery!"

Enrod was not impressed. Silent, doubtful, he prowled round the glowing machine. In fact he and Coltham both did. They argued the thing back and forth for over an hour.

"Coltham, you blasted fool, you've put your foot in it this time," Enrod cried, when his conclusions were complete. "In this infernal machine of yours you have spawned an equation or something which also probably existed when the universe began, out of which even the universe was possibly formed. Suppose this equation, or probability wave, or whatever it is, travels outward? Do you realize what might happen?"

"One could imagine it moving in a straight line, regardless of gravity," Coltham theorized. "In such a case it would be unlikely to hit above six or seven people. It is law that a straight line, even driven through a mass, can only hit about six individual units straight on. The rest are hit diagonally. Hence the difficulty that is experienced in hitting atoms—"

"Confound your theories, man! Don't you realize, that with the equation of iron in its makeup, this thing might attempt to wrest the mathematical setup of all iron? It could bring the world down round our ears! Everything has iron to some extent."

Enrod broke off and mopped his face. "Heavens, this is getting too much for me! This globe is alive and I'm getting out."

He swung for the door, but it was at that moment that the lambent, inexplicable fires in the globe seemed to build up into concrete form. A half material, half ethereal beam stabbed suddenly out of it, went right through the departing scientist and left a hole in him, flashed without a sound through the wall and left a perfect circle there, too.

Coltham twirled round, staring like a man face to face with Lucifer.

As for Enrod, his thoughts were suddenly beyond his control. This sudden change into a god was something he could not fathom. His brain reeled under an onslaught of crazy mathematical shufflings when the beam drove through him, a shuffling in which geometry and mathematics were interlocked. He realized he was in the grip of a mad probability, which at any second might yield to another probability and snuff him out of existence.

**F**OR a brief instant space seemed to roll out in front of his mental vision—time, space, matter and energy were there in complete mathematical unity, and he understood it! That was the odd thing. The probability changed, and with it all consciousness of his mortal entity. He winged, uncontrollably, through infinity—fell into a blank void.

Coltham, behind the machine, failed to get that ray—but he realized the danger—the instant he saw Enrod fall with half his body cleanly removed. Whirling around, he snatched up the nearest chair and hurled it into the midst of the mathematical monster—and in so doing sealed his own doom.

The globe exploded and the beam vanished, though it had doubtless done plenty in its few moments of life. The mystical

spawned equations seized on everything metallic around them, seized on everything that had an iron content, and that included Coltham. To his dazed eyes the walls and machinery turned pale blue under the invisible influence. He tripped and staggered, was caught up in the mad metamorphosis.

For him the mathematical probability-wave had of course a totally different position in space and time, hence his consciousness was briefly thrust into a setup different from that of Enrod. He was amidst gigantic palms and fat-boled trees, moving under a sky leaden with scudding, steamy clouds. Here and there flashed a strange bird—a pterodactyl, perhaps. He had slipped somehow into the early days of Earth!

The mathematical probability changed again as it tried to take from him the basic iron equations it needed. In consequence, Coltham's consciousness reeled in the opposite direction, the unknowably distant future.

Here, cities climbed into the skies, stood proud and herculean by the shores of an unknown sea of pure blue. There were people basking in the golden sunshine. Sand sparkled with the whiteness of salt. It was a vision of transcendent loveliness that whizzed and vanished like a lightning flash through Coltham's mind.

As it had been for Enrod, so it was for Coltham. His body was no longer with him. Even his consciousness was failing. He was the helpless tool of mathematical probability which was solely concerned with using his basic iron mathematics and discarding the rest. Somehow, the mathematics had to strike a balanced whole and so form into a complete unit, just as atoms, systems, and universes must balance.

Enrod and Coltham were gone, but the original beam from the globe, the richer for the equations it had derived, flashed on in a straight line at an angle of nearly forty-five degrees.

The devotees of Joseph Barlow never saw it coming. The big fellow had just turned toward the door in the corner of the huge boardroom when the hurtling straight-line ascension of Professor Coltham's equational beam arrived. To the industrialist's Yes-men it was the most amazing sight.

The corner of the room where Barlow was standing suddenly glowed with a magnificent display of spectrum colors. It was as though rainbows were interwoven with each other as those unfathomable transfigurations sought for the iron in their path.

Across a corner of the costly carpet, on the

paneled rectangle forming the doorway and side wall loomed, in truth, the beginning and end of all mathematics—so brief, so overwhelming, it had gone before the Yes-men could grasp it. Gone, indeed! The beam swept with it a great corner of the building, clean cut as though with a knife.

Barlow, stunned and incredulous, actually spun like a top in a luminescent haze. All thoughts of becoming senator, of altering the basic construction of the Grayham Dam, had gone right out of his mind. Instead he was permitted a view of himself as a mathematical integration fitting flawlessly into the pattern of the universe.

It only lasted a few seconds maybe, then he was conscious of himself again, hurtling away over New York's streets at a speed beyond comprehension. He marveled that he did not need to breathe or count his heart beats!

Ahead of him he saw a vastly looming apartment building, then came a strange overwhelming pressure and for him the universe burst into myriad points of light.

**S**ECRETARY MASON stood staring at Withers' gun as it leveled at him. He knew his life was forfeit and he was prepared to die—but instead he was treated to the most unexpected vision. It was so incredible that he wondered, for a moment, if he were not already dead. There seemed to be no other way of accounting for this.

There were three J. Clayton Withers! Each one identical, even to the clothing and the gun. Yet they were not in any way reversed as though mirrors were responsible.

Mason blinked, and at the same moment the most astounded expression settled on the tycoon's face. He caught sight of his two images, dropped his gun—and they did likewise! There were three separate and distinct thuds on the carpet.

"What the devil!" three mouths shouted. Then J. Clayton Withers became conscious of the impossible. He was in three places simultaneously, and even more extraordinary was the fact that he was able to think, for a split second or so only, in three different brains at once, and keep each one distinct. He had been going to kill a man—he had unraveled the cosmical calculus—he could see into a future time—all at once!

Then the terrific tension gave way. He fell to the floor, utterly paralyzed, and at the same instant his twins vanished. But his body, before Mason's eyes, split into a myriad microscopical images of J. Clayton Withers

and went hurtling toward the outer wall of the room. Clean through it—matter through matter! Then whatever it was had gone and the room was silent.

Mason felt life surge back to him. He gave one mighty scream and fled for the door. Tearing it open, he went down the corridor shouting with a hysteria that bordered on insanity.

Fanny Reardon arrived at Logan's Auto Dump on time to find Nick Blake impatiently awaiting her. Within ten minutes they were both in the plane, climbing rapidly over Long Island in the first lap of their trip to Florida.

"You got sense, kid," Nick Blake murmured, glancing at her as she sat beside him with her fur coat up to her chin. "We can skip to Florida until the heat's off. Don't forget that we're absolutely safe. Boyd Amos will take the rap for this lot, believe you me. Then we can celebrate right."

"Not we—me!" Fanny Reardon retorted. She turned suddenly as she spoke, her painted face grimly determined. Blake glanced down, and started slightly at the sight of the automatic in her hand.

"What's the idea?" he snapped. "Don't forget that I'm driving this plane. If you try anything funny, it'll be too bad for us both!"

"You're not the only person who can pilot a plane, Nick! My main thought at the moment is that you're carrying fifty-thousand dollars, and that money can be mighty useful to me. I've had enough of you, Nick. You're a cheap, no-account murderer, and a girl's got to look to her future. If you drop in the Atlantic from twenty thousand feet up it won't improve your appearance. Anyway you'll be dead by then—I'll see to that. Who's to know how you got in the sea?"

Blake laughed uneasily. "Quit clowning, can't you? You and me are too close for you to have such ideas."

He stopped as the gun stuck in his ribs.

"I want that money, Nick. Hand it out!"

Because he knew Fanny Reardon well he slowly pulled out his wallet, retaining control with his free hand.

"Serves me right for trusting a cheap dame," he sneered. "Here you—are!" He slammed up his wallet hand furiously on the last word but he missed for the simple reason that Fanny was expecting his move and had jerked her head back sharply. Her gun fired three times to make sure. Not a flicker of emotion passed over her painted features as Blake fell over the controls.

In a moment she had bundled his body

onto the floor, righted the plane, then felt with her free hand through the wallet he had dropped. Her fingers ploughed gleefully through the bills.

"Another mile and I can drop him," she mused, staring through the window. "Let's see. I'm over Long Island, three thousand feet up."

She glanced about her, puzzled. There was a pale blue light outside the observation window, even inside the cabin itself. It was as though a blue searchlight had turned on somewhere.

"What is this?" she whispered, her lips suddenly dry.

As she turned in her seat she realized that for once in her hard-boiled life she was frightened. The dead body of Nick Blake was glowing, even through his clothes. Even the blood in the cabin floor flamed like phosphorous. Fanny just sat there, stunned, hardly conscious of the plane's wild lungings.

"You're a ghost!" she breathed, her eyes starting. "Mebbe there ain't such things, but you're one! Don't you dare touch me!"

**S**UDDENLY Nick Blake was no longer there. Fanny had no idea what happened to him. It seemed as though his corpse turned into a swirl of gas, and twisted like a cyclone. Then it disappeared.

She gulped, corrected the plane, stared outside. Something was wrong out there. A moment ago she had been heading over Long Island. Now there were little points of light all about her.

Stars! Stars by the million! And a beam cleaving toward them!

And even as she realized it her breath froze solid on the window. A cold such as she had never known bit through her fur coat into her very marrow. The motors went dead. Air had vanished.

Her mind, utterly untrained to science, grappled helplessly with this sudden retribution. Those stars meant nothing. Otherwise she would have known that the equational beam was streaking through the autumn night towards Pleiades, across the center of the Milky Way, slightly south of Procyon, and across the upper half of the bent rectangle of the star group Monoceros. Nor could she guess that pin-pointed in the angle of these groups, a space ship hovered.

She got to her feet, turned a slow somersault and, demoralized with terror, found herself upside down. Gravity had gone. What

attraction remained, was in the center of the cabin.

Air was vanishing fast. There were icicles round the airlock door where the void was sucking it out.

Fanny Reardon kicked savagely and turned right way up again. She clutched the window and stared out. There was still blueness everywhere, bathing the whole plane, coming from a source, way below behind Long Island somewhere. This was impossible, utterly ridiculous. Now that she came to look there was no Long Island—in fact, nothing recognizable at all.

Suddenly she screamed as she felt something like a white-hot shuttle hurtle back and forth through her body. At the same instant the plane vanished, its iron makeup converted. Fanny's body followed it but a brief second later. For two seconds of time the cheap, unscrupulous chorine was a goddess, able to fathom all time, space, and infinity. Then the iron in her makeup was resolved into its mathematical necessities and her entity ceased to be. . .

Dath Razor looked up, with a start, from the space-mirror and sought the insectile faces of his comrades. Though they could not register much expression there was no denying their uneasiness.

"What has happened to that third world?" Razor demanded. "Just look at it! Shattered by a V-shaped scar! Inexplicable chaos appears to be reigning. How strange! How annoying! Just when we had made all our preparations!"

He paused and turned as an alarm bell rang throughout the ship. The master pilot turned instantly to his instruments and gave a cry of alarm.

"Master, something has been projected from that third world! It seems to be—" the flutish voice was incredulous—"it seems to be a ball of—of mathematical probabilities!"

"A what?" Dath Razor stared. Then his tone grew sharp. "Where is it now?"

"About three million miles distant. Fortunately it is not in our direct path. We can observe it."

Immediately the scientists all turned to the scanning screens and watched in thoughtful silence as the incredibly fast ball of blue fled past them at the speed of light. Never had they seen so perfect a circle. It was flawless.

The scanning screens adjusted themselves automatically, kept the enigma in perfect focus as it fled toward the furthest reaches

of the cosmos. As it went, its speed increased even beyond that of light, seeming to show that it had no ordinary laws to govern it. The fact was doubly proved since the light waves from it were still visible, marking its course. In every way it defied understanding.

It passed through immense gravitational fields without any sign of divergence. It went through the core of the hottest stars, and only revealed that it had a sentient intelligence when it started to slow down. Nothing but intelligence could account for its stopping as there were no gravitational fields in the island emptiness where it finally elected to halt.

The Centaurian scientists looked at each other in amazement, and waited.

To gaze on the thing—about the size of Earth's moon—was to become conscious of things beyond imagination. Even to the highly sensitive minds of the superscientists it was suggestive of something supernal, of seeing the beginning and end of all space and time. Strange, puzzling thoughts passed through their minds—and faded.

**W**AS it a world? A sun? Nothing was certain about it. It had no gravitation. It had no heat. Nor, according to the instruments, had it any light. And yet it could be seen.

Nothing of the scientists' devising, masters of the cosmos though they were, could get the slightest reaction out of the Thing. It was the greatest X in their vast experience. And to come up against the unknown in these primitive parts of the Cosmos was a severe setback to Dath Rasor.

He turned back suddenly to the instruments and went to work with grim vigor, or-

dering the ship to be halted so he could have absolute steadiness. He was clearly bewildered when at last his studies were at an end.

"I do not understand," he breathed. "Out there is something that obviously started as a basic mathematical probability, has expanded outward with immense velocity and converted everything in its path into fresh mathematical balances—until now we see a complete whole, a perfect sublime unity of figures living on itself, within itself. An alien, thinking world in a universe of coarse matter and energy. It gives off energy, but absorbs none. It is the unknown quantity.

"I do not know what gave it birth. Maybe it sprang from some basic universal equation. Only centuries of evolution, even by us, would be able to explain it."

"Is it dangerous?" asked the master-navigator.

"I think not. That world is an equation—it has nothing more it needs. Basically we are all figures, but we are outside that Thing now because it has stabilized itself."

There was a long silence in the ship, then the master-navigator gravely asked another question.

"Do we continue to the third world?"

Dath Rasor shook his head.

"No! I am thinking that we may have been mistaken, that on that world there may be scientists far cleverer than we. Perhaps they created this mathematical figment to warn us to keep away. No, set the course at right angles."

Dath Rasor fell silent, looking into the scanner on that blue, distant thing. Then he closed the switch which blanked the screen. That unknown quantity was too enigmatic for material eyes even to look upon!



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STARTLING STORIES

# THE READER SPEAKS

(Continued from page 8)

to-be-all-bugs story, for we could figure out the plot from last time.

We skip over all the good stories until we arrive at "The Devouring Tide" by Polton Cross. A classic. Polton Cross may even rise to the heights of the Immortal Stanley G. Weinbaum and Don Stuart. THAT was good (p.s. it was STF).

You should be more careful where you place your ads. I cut out my coupon in the Fall ish and naturally it showed part of the next page. At the top it says "follow this man!" and below it where the space is it depicts a bandaged man and the caption reads "your doctor and hospital bills paid." All right then, don't laugh.

And in that admirable section known as THE READER SPEAKS, utters, roars or in other ways sets up molecular disturbances, you foolishly put my letter. But that isn't all, you made puns on the "sage" part of it. Oh well, I never cinnamon like you but then again that isn't what we camphor.—68 Medbury Road, Durham, N. H.

P.S.: I have cut open the letter to write in a witty (?) P.S. About your spicy comments you mustard thought they were funny. They were. But it does nutmeg any difference.

You didn't need to underline those atrocious plays on words, Kiwi Perry. They hit us where it hurts without italics. But perhaps you were a trifle groggy from the Xeno you hi-jacked from the rocket deck locker. If I catch you rummaging around there again, you'll get your noggin so scotched you won't be able to toddy home. Vodkan you expect when you champagne around in other people's Xeno?

## HOT STUFF

By Ken Krueger

Hiya Sarge: My Gawd! Is that a cover from TWS? I thot it wuz Spicy Space Stories when I fust saw it. That gal is really something. But—I did like that background drawing of the octopus. It was a nice cover except for the gal. If she runs about like that all of the time she is gonna catch a pretty bad cold. Give the cover 7½.

I suppose you expect me to list the stories etc., next. That's just what I'm gonna do. In first place is "The Giant Runt." It was not an excellent story, but it was the best in the issue and earns a nice 8 for itself. Second place goes to "Princess of Pak-mari" with a 7½. Bet you're wondering where I get those figures from.

Third—"The Devouring Tide" with 7.

Fourth—"God of Light" with 6.

Fifth—"Terror in the Dust" and "Helicopter Invasion" with a 5 each.

Last is "Horatius At the Bridge" with a measly 4. Best pic in the ish was Donnell's on page 64-65. Next come those on 93 and 83. The rest weren't so hot.

The features rate 8 en masse.

Now then, to the readers. How about some of you boys and girls sending me a list of the weird and science-fiction books and magazines that you have that you would like to sell or swap? I have quite a bit of stuff myself, and we may be able to work out a good deal that will make everyone happy.

And by the way, to you, Sarge. I hope you appreciate the fact that I wasted an extra piece of paper by double-spacing this. You know, that's downright unpatriotic. You should try to conserve my paper.

by for now.—123 Edna Place, Buffalo 8, N. Y.

Quick, Frog-eyes, open up another jug! The Sarge is suffering from shock. This Krueger is the first Earthman since the dawn of time to prefer an octopus to a pretty girl in diaphanous—plenty of syllables there, Wart-ears—garments. Or perhaps he's another octopus in disguise. Remind me to check this with the Planet patrol on its next trip around.

## ABJECT APOLOGIES

By D/Donnell

Dear Sarge: My appreciation to you for your in-

troduction and the comments to your readers on my illustrative work.

However there has been a mix-up of names that should be corrected if you will please. I know you will appreciate the information for your files.

My last name is not "Donnelly" as it appeared in two issues in your comments; but it is Donnell, with the accent on the last syllable, Don-nell.

My illustrations are signed D/Donnell, the "D" being the initial of my first name. That straightens out that part of it, Sarge.

Now we come to "A. J. Donnell." My husband, who is S/sgt. A. J. Donnell, now serving in the Army Air Forces in England, is in civilian life an artist, and has been a well known illustrator and advertising man for several years.

I want you to have this information so on a future date you can correct it in your department "The Reader Speaks," where in the Summer Issue, on page 106 you wrote, "As for your comments on Donnelly, I'll let you in on a secret. A. J. Donnelly isn't a he. She is a gal illustrator, and I'm delighted you like her work."

Thanks again Sarge, for your generous remarks on my work—West Reading, Pa.

## A PITIFUL THING

By Robert X. Schick

Dear Sarge: I'm sorry to say it, but the Summer issue of TWS was a pitiful thing. Only two of the stories was worth reading and only two artists did passable work.

One of those artists was Bergey. He's doing swell work on that cover and his color schemes don't make one shield his eyes any longer. Morey is the other. After many years of slobbery he's becoming good. I hope he can keep it up. Miss Donnell is a good artist, but she doesn't know how to draw humans correctly and she puts them into such peculiar positions. Marchioni used to be one of science-fiction's greatest artists.

One of the stories was THE GIANT RUNT which holds on to first place by a wide margin. The only thing wrong with it was that the supposed scientific parts were puny and unconvincing. The other, TERROR IN THE DUST. This tale was suspenseful and thrilling.

In third place is PRIESTESS OF PAKMARI, mainly by virtue of length. DePina did not tell enough about the main current of the story.

Fourth, THE GOD OF LIGHT. Although I may be wrong, it seemed to me that Eschback was trying to imitate A. Merritt's style. If you ever read the "Metal Monster" you would know what I mean.

Fifth: HORATIUS AT THE BRIDGE. The story was rather pointless.

Sixth: THE DEVOURING TIDE. Old plot and somewhat irrelevant.

Seventh: HELICOPTER INVASION. This story had its good points.

Various items:

Thanks for an elongated Reader Speaks, and speaking of the Reader Speaks, here are my tabulations for the Spring Issue based upon the Reader Speaks:

1. STAR OF TREASURE.....1.7
2. VEIL OF ASTELLAR.....2.5
3. UNSUNG HERO.....3.2
4. JUKE-BOX ASTEROID.....3.8
5. GAMBLER'S ASTEROID.....4.3
6. BATTLE OF THE SOLAR SYSTEM.....5.4
7. GAS ATTACK.....5.6

—927 Faile St., Box 59, N. Y.

You certainly don't believe in pulling your rocket blasts, Kiwi Schick. Our back hair is still smoking from that broadside. And go easy on D/Donnell. Whether you care for her humans or not, she is one of the top illustrators in the science fiction field. So pull in your space fins and try to get a little more fun out of life. That you liked the cover shows there is hope for you, no matter how faint.

## CACTUS PLANT

By Gene Hunter

Dear Sarge: While still far below average in quality, the Summer issue of Thrilling Wonder Stories has a number of redeeming features. The cover, I fear, cannot be called one. Really, Sarge, (Turn page)

do you think it does justice to a science-fiction magazine? Our Hero is holding a deadly sizzle-gat and firing at a Walt Disney octopus.

Our Hero holds Our Heroine close against him, and she is screaming lustily because, it appears from the picture, she has just sat on a cactus plant, which occupies the position in the immediate foreground, center. I'll say no more about this insult, but give it a regrettable 2.5, or average, rating.

The interior art was below average, with only the new artist making a good showing. Marchioni and Morey, as usual, are poor. Some reader this ish suggested a cover by Donnell. I heartily agree. 2.375 for the pix and 2.5 for Merwin's article.

I read "The Giant Runt" as a fantasy, rather than straight science-fiction, since I am rather skeptical of some of Mr. Rocklynn's scientific premises. He probably stretched a point or two in his reasoning, but nevertheless the yarn was very good, taking first place in this month's line-up. (3.5)

After such really excellent stories as "Alcatraz of the Starways" and "The Star Guardsman," I had expected something a good deal better from De Pina. While a good yarn, it lacked everything that made the former two so interesting. (3.0)

I am not certain how other fans will take "The Devouring Tide." They may praise it, as I would like to. One of two things evidently befell that story. (1) Cross wrote it as a novel and then decided to shorten it, or (2) he submitted it as a novel and the editor, not liking it as such, ordered him to trim it.

Of one thing I am certain. It was not originally intended to be a short story, and it would have made a great novel, especially if the author had toned down the stilted and formal dialogue. As a novel it would have been undoubtedly a classic, as a short story it is barely average. (2.5)

"Horatius at the Bridge," like most of the other amateur contest yarns, is about average. (2.5) "God of Light" was certainly disappointing, and I had expected something much better from this author. (2.0)

Sarge, was "Terror in the Dust" printed in all seriousness, or was the senior astrologer laughing up his sleeve when he accepted it. Really, it struck me as being one of the most silly, far-fetched, amateurish efforts I've read yet. And I hate the words "silly" and "far-fetched" when applied to science-fiction. (1.0)

I suppose the reason "Helicopter Invasion" rates so low with me is not the fault of the author, but of myself. I have never liked these surprise ending short-shorts anywhere, especially in science-fiction. (1.0)

The names of Ross Rocklynn, Albert DePina, Polton Cross, and Lloyd Arthur Eshbach make an impressive list, but none of these was up to his usual standard.

Getting along to The Reader Speaks, we come to an interesting letter by one who signs himself Jhetton ko Tal. He has brought up some nice questions for discussion, although I can't agree with him.

As for heredity, I do not believe that one inherits certain qualities from one's ancestor's direct, but rather inherits a tendency towards those qualities, especially such object ones as honesty, strength, cowardliness, etc., just as one does not inherit mental diseases or t.b., but a distinct tendency to these diseases, which is an entirely different thing.

As for our friend John Doe, who comes home to find his wife in the arms of another man and becomes angry without knowing the man is her brother, I believe the James-Lange theory covers this quite well. A man in the woods sees a bear, and, logically enough, runs.

C. G. Lange and William James, working separately, produced almost identical theories: that the man does not run because he is afraid, but rather is afraid because he runs. Therefore, his fear arose from what he did about seeing the bear, and not from merely seeing the animal.

John Doe's anger from seeing his wife in the arms of another is uncontrollable, since he is reverting to the primitive reaction of protecting his mate. The brain did not send a message of anger to the adrenal glands—the adrenal glands sent a message to Doe's brain causing anger.

Interesting, isn't it?

Sincerely—U.S.N.C. Hospital, Santa Cruz, Cal.

Hold on there, Gene, you've got us dizzy. No, it isn't that last jug of Xeno either. Let's see if we've got it straight. If I meet a bear in the woods and do an off-to-Jupiter away from there, I don't run because I'm afraid of the beast, but I'm afraid because I'm running? Kiwi, I don't get it. If I see a bear in the woods, kiwi, I'm scared—probably so scared

I'm paralyzed, and not on Xeno. So how does running make me afraid when I can't run? You figure it out between searches for other men's wives.

## THAT SCREAMING COVER GIRL

By Austin Hamel

Dear Sarge: I really don't know how you ever printed Ford Smith's "Helicopter Invasion!" It was an exact carbon copy of his "Gas Attack," which appeared in the Spring issue. Any moron who read "Gas Attack" could have told you the ending to "Helicopter Invasion."

Bergey again, but a slightly different Bergey. The summer issue cover was his best for this year. It was like a photograph, and the coloring wasn't bad at all. At first I thought the dame was screaming at me, but then I decided it was the report of the hero's ray gun.

The story which it illustrates, is the best story to appear in *Thrilling Wonder Stories* for an age. The beautiful passages, and description, in Albert DePina's "Priestess of Pakmari" won a place in my heart. The characters, the style, and A. J. Donnelly's fine illustration, all made up a terrific yarn. Speaking of Donnelly, he's, er . . . she's really improving by the minute. May I once more suggest that you give Bergey a well deserved rest, and let Donnelly do a cover?

The letter department is amazingly improving! Your choice of letters has vastly improved over the old "I like this . . . give it a xeno jug" style. (I used to write them too!) The newcomers, Benson Perry, Ko Tal, and Bob Schick, all did swell jobs.

I was delighted to see Morey at his almost-best, back once more. Give him a cover.

"The Giant Runt" was a story and no more. Done by any other hack, I would say it was good, but I know Rocklynn can do better. The style of writing was so extremely simple. I don't believe I've heard much of Paul S. Powers, but his yarn was the best short, the only one that deserves comment.

I may get killed for this, but I'm going to ask you not to print what's to come in the next issue, unless you make TWS a monthly. I was so excited when I saw that the next issue will have a novel by Murray Leinster, that I don't know how I'm gonna wait three months to read it!

Glad to see another gal writing to The Reader Speaks. Last issue, I read Iva Golden's letter, and when I took a walk later in the day, I found that she lived in the next house to me!

I was also pleased to see Taurasi's letter in The Reader Speaks.

Is Nelson Bond doing any war work, or is he in the Army? If not, get something from him as soon as possible. Anything but Tubby from Cummings! A novelette by Polton Cross. Leigh Brackett, when she gets done with the novel for *Startling*, should do one for you.

In the ways of Artists, your present staff is quite satisfactory, except on the covers. Marchioni's drawings for "The Giant Runt" were modernistic and not bad at all. Just tell him to keep off the "Who spilled the ink on the page?" type drawing that he did on page 45.

Do I really notice less advertising in the summer issue? Hooray! Waiting for Leinster's novel, I remain yours for a different cover artist!—2090 East Tremont Ave., Bronx 62, N. Y.

The deminude brownette on the Summer Issue's cover seems to have made a lasting impression, except on Kiwi Krueger, the lad who liked the octopus better. A very tasty dish indeed, even to old Sarge, who has seen 'em in all shapes and sizes in his day. But you'll like the Murray Leinster story—it's a molecularly-magnetized honey. And just to keep you in the padded cell, the Sarge got a tip the other day that Leinster is readying a sort of sequel to "The Eternal Now" which should be even better. So keep your space hatch battened down and hang on until it appears.

## BYPENDENTIS ON THE ZYPHRIA

By Margaret Montague

Dear Sarge: Having tried many times to write you, I have finally decided to do so. You see, I've been having a little trouble with your lingo. It's so different from ours. So if you'll pull up that extra



keg of Xeno (I'm sorry I don't have any Zephyria with me) we'll get down to *mostly* compliments.

Leigh Brackett is, of course, your best writer, with Cummings and Rocklynne tied for second. More fantasy, PLEASE and, second, science fiction. Leave the planet stories alone. (They're an also-ran to me as the planets themselves don't live up to expectations. Jupiter's too hot, Pluto's too cold, Mars is too everything and the rest of them just aren't worth talking about. The last time I made the rounds, they were as dull as ever, especially the people.)

Don't let them kid you on the covers. They're very good, and Bergey's was extra good on the summer issue. Nix on the departments, except for Sgt. Saturn, of course. He's a dypnon. (Venusiana for darling.) You know, if it weren't for my merman—well—

By this time you've probably guessed I am not of your planet. My merman and I (I being, of course, a mermaid) are now upon your planet for a visit, inspecting things, to see what progress your world has made. We left Venus tomorrow. You see, we came in what you call, a "time machine." What a quaint name for a syporonda. Earth is a beautiful place, but we are getting homesick for our beloved Venus. However TWS and STARTLING helps keep us occupied when we are not bypendo. (Pardon, Venusian for sight-seeing.)

So help yourself to another swallow of Xeno. Sarge, and next time we come to Earth, I'll bring you some zephyria. (Wait till you take a swig of that!) My real name is Mypodena, pronounced Mypodena, but you can see I am incognito.—2213 Esplanade, New Orleans 19, Louisiana.

While the Sarge doesn't make a hobby of weight guessing, he has always wondered what a mermaid scales. Sorry you found the planets so ural, ural (Xenonian for "too, too"). We'd like to mineyxiota cyccoriosth wyd zoo (Xenonian for "like to know more about") your syporonda and how it works. Or, as the Miontados Srroykajix ("Indian Chief" in Xenonian) said, "How?"

Afraid we'll have to forego the delights of zephyria, however. Our jug of Xeno just conked us on the head as a warning to be true. Walk up, Frog-eyes, you Plutonian oaf, and set up another jug!

## FAR AWAY AND LONG AGO

By J. M. Gibson

I have just got hold of a rather aged copy of your magazine, *THRILLING WONDER STORIES*, April, 1949, on page 86, you state quite definitely that the planet Uranus goes round the Sun in a direction opposite to that which the major planets pursue.

Now I don't want to bother you and I expect you've had plenty of letters about this already, but I must point out that this statement is not correct. All the nine major planets behave nicely and go round the Sun in the same direction. I actually telephoned the Observatory at Greenwich and they confirmed this.

I am very sorry to trouble you but are you wrong or have the Royal Observatory and the *Encyclopaedia Britannica* slipped up?—23, Whitehead's Grove, Chelsea, S.W.3, London.

That is really pulling them out of the past, Kiwi Gibson. Old Sarge had to do some fast shifting in his own superonda even to get his hands on a copy, since he wasn't even born then and even in this advanced era pre-natal memories are highly suspect, scientifically speaking. But the evidence is in your favor, and some pre-Saturnian pulled what American baseball players call a skull—or, boner, if you prefer the Oxford version. We are proud and happy to announce that the Royal Observatory at Greenwich is right.

A glance through the old issue is of interest. TWS was then within one issue of celebrating its tenth anniversary and what a grand outpouring of Xeno fountains and rocket juice (Turn page)

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that occasion was if rumor be true. But there have been a lot of changes outside of our own birth since April, 1939.

TWS then had three novelets, written by Eando Binder, Ward Hawkins and Frank Belknap Long. Our octopus loving friend, Kiwi Krueger, will be sorry to learn that it contained no eight-legged pin-up pussies, but the fact that the lone girl on the cover (a blonde) has her curves hidden by an awkward looking space suit and is very small in size should please him.

The five short stories were by Roscoe Clark, Henry Kuttner, Alfred Bester, Clifford Simak and Ray Cummings, most of whom have stood the test of time nobly since. Scientifacts was present, then as now, and the other special features included a science quiz and a picture feature by Jack Binder, grimly displaying what would happen if the sun went out. A bit chilly, what?

But thanks to Kiwi Gibson for giving us occasion to look in the old issue. It takes more than a world war to put TWS on the shelf and lower the standards of stories and illustrations. Here's tilting the jug at you.

## HEREDITY FAN

By Bill Hesson

Dear Sarge: In the last ish, you had a letter by a fellow named "Jhetong ko Tal." His letter states that, "You asked for it." In my opinion, it is not you, but he, who has asked for it. Please bear in mind that I am not trying to start a feud, I am merely stating my own opinions of the matter. He seems to be down on science, and because I am very much for science, I am inclined to argue.

In the first place, brain power does depend mainly upon a person's heritage.

This fact seems to prove that normal characteristics of *Homo Sapiens* are produced through heritage, and not through artificial methods induced on parents. Does it not seem reasonable that this is also true of brain power? It has been proven that a person's IQ is dependent upon,

1. His parentage (heredity)
2. His effort to develop it.

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Now, for the endocrine glands!

"Why does the adrenal gland pour adrenaline into the blood stream?" When a person is stimulated to anger, or fear, the cerebellum sends an electrical impulse to that half of the adrenal gland known as the adrenal medulla, the cells of which produce a secretion called enephrine (adrenaline). When the cells receive this electrical impulse, they secrete the enephrine. Unfortunately, most of the other ductless glands do not respond quite so readily to mental stimulus.

Heredity is, in the long run, determined by environment. If *Homo Sapiens* were taken outright and put into an icy and cold world, the species would probably die out. But if it were gradually evolved to fit this new environment, he would most likely grow fur or in some way evolve for protection against the cold.

Now for the stories. None of them were particularly good. Rocklynn wrote a fair novel. De Pina's yarn was one that you could concentrate upon to some extent, but it was not one that you could remember for very long. Cross wrote the best short, Powers and Eschbach were next, with Ferry bringing up the rear.

The cover was above average for a change. I can't figure Bergey out, one fish has a good cover, then the next one stinks. He is certainly inconsistent. So D. Donnell is a gal, eh? At times she almost approaches Finlay. But, I have almost begun to believe that Finlay will never have an equal. Paul is as great as Finlay, but his art is of a different type.

Well, Sarge, someone is ringing the doorbell and, as it is probably the installment man trying to get me to return the typewriter. I had better close. Here's to ya, old boy!—*Pasadena, Cal.*

To the old Sarge, this argument is a lot like the hen and the egg one. Both the heredity and the environment boys have a lot on their sides. Chances are that the above mentioned *Homo Sapiens* would be a pretty sad museum relic if either factor were left out of his development.

We're in favor of both.

## A KISS FROM THE A.A.F.

By Horace J. Hervey

It's been pretty hard to get SF mags of any kind down South here, but as I strolled down the street the other day what should I see but a newsstand all aglow with an impossible Golden Light.

You guessed it. As usual it was TWS. Boy what a dive I made for that newsstand. It meant as much to me as a cigarette to a man who has been a month without one.

The cover, "Swell." Tell Bergey to keep it up and I won't kick. THE GIANT RUNT, disappointed me a little, mainly because I've read much better from "dear old Rocklynn." As evening fell I was reading THE DEVOURING TIDE. It left me cold and frightened all nite long.

More shorts like this please.

Cross is okay. I find it hard to pick a first from these stories, Sarge, but if PRINCESS OF PAK-MARI had been longer, I would certainly rate it first.

Well, Sarge, duty calls so I'll have to bid adieu. Say, whatever happened to Binder. I've been so busy in the last 15 months that I wouldn't know if TWS was still published or not. Horrible thought. Yours till the next time.—*Moody Field, Georgia.*

## AND NOW FROM THE NAVY

By John A. Nicholas

Dear Sergeant Saturn:

At present I'm convalescing at a Navy hospital, but I hope to be back in action soon. I happened to pick up your magazine in the reading room here and went through it like "Burgess" Theta Ray" through butter.

I just love science fiction. I'd give ten years of my life for ten days of life in this world a hundred years hence. The roar of rockets, I know, is in my blood. I'm a man of the future, born too soon.

So I'll make up for it by dwelling in that exotically, thrilling tomorrow through the medium of your stories.

Incidentally, when our little imbroglio with the Japs is ended, look for one of my yarns amongst the  
(Turn page)

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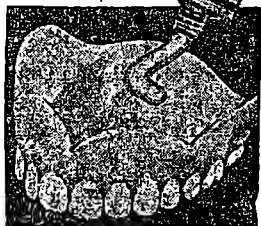
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I'm a writer of fiction and fact articles, but strangely never have tried my hand at science-fiction.

I guess I held it in too much reverence to attempt creating it myself. I've had a few dozen stories published in magazines and newspapers throughout the country.

I've hung up my pen temporarily due to the war, but when I take it up again, look for my brainchildren in that stock of prospects.—Oakland, Calif.

A couple of swell letters, what, Wart-ears? And tell Frog-eyes to stop dallying with the Xeno while you're at it. Get a message back to Earth wishing Cadet Hervey his wings and Machinist Mate Nicholas a speedy recovery and success in his efforts to write salable science fiction stories when the war is won. Shake those stumps, here comes some more carrothmetic.

## MORE CARROTHMETIC

By George W. Frank

Dear Sarge Saturn: Time Sedan No. G13 coming in, whizzing on split atoms, to pick up a drum of xeno and a case of TWS mags for the Time Travelers' Convention: Swish! Kerplunk! Sorry about smashing up your desk, Sarge, but why don't you build a time hanger in your office?

Now that I'm here, I'll dish out some "carrothmetic" on the Sun Ish. "The Giant Runt" and "Priestess of Pakmari!" run neck and neck for first laurels—20 xeno vegetables apiece.

"Eeyowerowyarrh!" but didn't Rocklynnie ladle out the human interest and grow a mouse into a man, while De Pina's masterpiece is dripping with adventure. Let's drape rainbows around their shoulders and hope those boys come through with more yarns soon.

Fifteen carrots to "Dreaming Down Axis Planes" for third place—skedaddle, Japs, the Yanks are coming into the homestretch toward Tokyo. "God of Light" draws 10 carrots for the ingenious menace set-up. Eight carrots to "Terror in the Dust" for the unique "human-brain-in-ants" vengeance. Seven carrots to "The Devouring Tide" for the scientific wizardry, though I find that type of ending distasteful.

Five carrots each for "Horatius at the Bridge" and "Helicopter Invasion." Perpetual Motion and Basic Energy have a new brother, Absolute Pitch. Yeah, and who'd ever have thought it—a story plot in "Hummingbird catches mosquito!" What next? "If oats bugs were monsters, Eeyowerowyarrh!" Ten carrots to "The Reader Speaks," etc.

Next to place-kick the swift kickers' slats. Phooey to those who rarely find a scientific yarn to suit them. If they meant it, they'd quit TWS—they don't. Phooey to those whom no cover ever suits—this one's a doozie, good for Bergey.

And let's see anyone beat Donnell's Interior for "Priestess of Pakmari!" Phooey to those who'd kick out the shorts—the proving ground for new writers, and it helps more writers eat. Some shorts are gems, and the poor ones make the topnotch yarns shine so much the brighter.

It's similar with life. If people had all their desires handed to them on silver platters, if all their problems were wished away, if all their goals were reached without a fight, would not life become a little boring and monotonous? Also, a too-large percentage of Americans fail to appreciate all that goes to make up our democratic way of life.

Even this devastating war has failed to open the eyes of all home-fronters. An army of grumblers grumbles on, an army of faultfinders yaps its head off, an army of schemers tries all kinds of ways to outwit the ration boards. Then there are those who brag how much cash the war's making them.

It's the soldier, the sailor, the marine, and the aviator—the men who do the dirty work, and a swell job they're doing, too—who are coming out on the little end of the horn. Thousands giving their lives. Thousands with physical injuries and losses and disfigurements, soul-shattering memories, hard-boiled temperaments, and what else you can think of. Few home-fronters fully realize how soft they have it!

Now to the letters: Jhet ko Tal, you sure did smack Willie Tell's apple with both barrels. Maybe you'll stir up a Vespa Maculata's nest, but I'm routin' on your side, brother.

Yeah boy, all *Homo Sapiens* needs do is let the  
(Turn to page 106)



*Let these guys  
start it!*

There's a day coming when you'll want to stand up and cheer the greatest victory in history.

But let's not start cheering yet.

In fact, let's not start it at all—over here. Let's leave it to the fellows who are doing the job—to begin the celebrating.

Our leaders have told us that smashing the Axis will be a slow, dangerous, bloody job.

If we at home start throwing our hats in the air and easing up before the job's completely done, it will be slower, more dangerous, bloodier.

Right now, it's up to us to keep on buying War Bonds until this war is won.

Let's keep bearing down till we get the news of final victory from the only place such news can come: the battle-line.

If we do that, we'll have the right to join the cheering when the time comes.

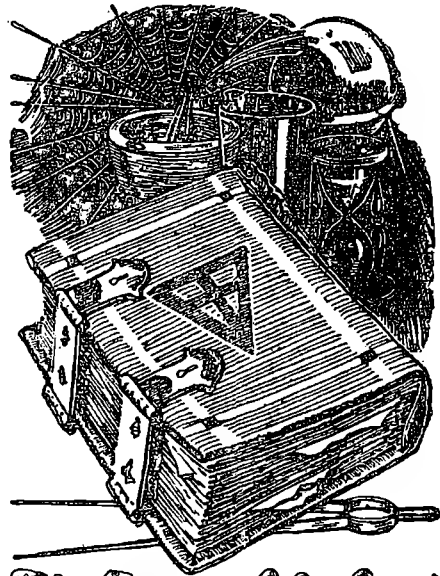
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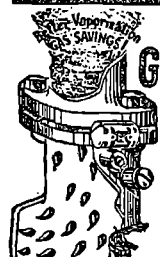
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Intelligent grit run out of his cranium in full capacity, and this old world would be more of a paradisiacal abode, instead of a Hades to blow itself all over creation every generation and, in between, everybody ready to jump at the other fellow's throat to grease his own soupbowl with more gravy.

Undoubtedly the lawyers do benefit most from the laws they make and break, and when the debating society in Washington wants a diversion they can always argue on how to build a ceiling over some poor fellow's watermelon patch. A form of mental relaxation, maybe?

Maybe the educational system would change for the better by making the ultimate, fundamental purpose to teach the squirts how to think, and why they should think, instead of what to think. And the textbooks carry too much dead weight that can't possibly benefit them for meeting life head-on.

How much saner to concentrate on detecting their potential abilities by aptitude tests at an early age and training toward a definite goal, while carrying other superfluous studies on the side, as desserts—but then America's slowly awakening to the worthiness of such a system. Eh, Sarge?

Another thing—the pack of superstitions handed down from generation to generation and the inferiority complex inhibitions, such as the Giant Runt's, should be killed as they rear their ugly heads. Superstitions and an inferiority complex created that diabolical ego, Hitler, and are unquestionably at the bottom of most family and world troubles. Rooting out those two evils at an early age would eliminate a lot of head and heart aches in later life, don't you think, Jhet?

Now a comment for Davis and the future-clothing-complex: Look at the Janes and Jacks on Jane Street, brother—any hot day. There you see the Janes dressed as cool as you please, and then see that business man crossing the street, wearin' a coat and sweatin' under the collar to beat blue Guinea. So isn't somebody being gyped on the clothes habits of today?

And it ain't the women, and then again males often don't topcoats for style when they feel more comfortable without. Comfort first, is my motto! I'll bet the old sarge is sweatin' under the collar, readin' this. So aren't those over-dressed men of the future just strutting in the same old rut? anyhow, it's the story that counts, not the dressing!

And so now I'll skip away into time, to pick up old Frankie Bacon for the Time Travelers' Convention, and I'll bet he'll be sweatin' under a ruff! Sincerely—R. F. D. 2, Butler, Ohio.

Well, George, old sock, you certainly sweated off a dozen earfuls yourself this time. From carrothmetic through squawks on squawks, via such way stations as home front chiselers, hereditarians, vocational training against pure learning, Washington lawyers, inferiority complexes, to the fact that our unfair counterparts get away with murder as well as with most of their clothes is really covering ground.

But it's all right with us. We like to hear definite opinions from fellows like you, George, so stay in there pitching. War-tears, tell Frog-eyes to bring up an extra jug of the pre-war vintage Xeno for old George W. He's talked his throat dry and his tongue is hanging out.

## BERGEY'S BABE AGAIN

By Norman H. Green

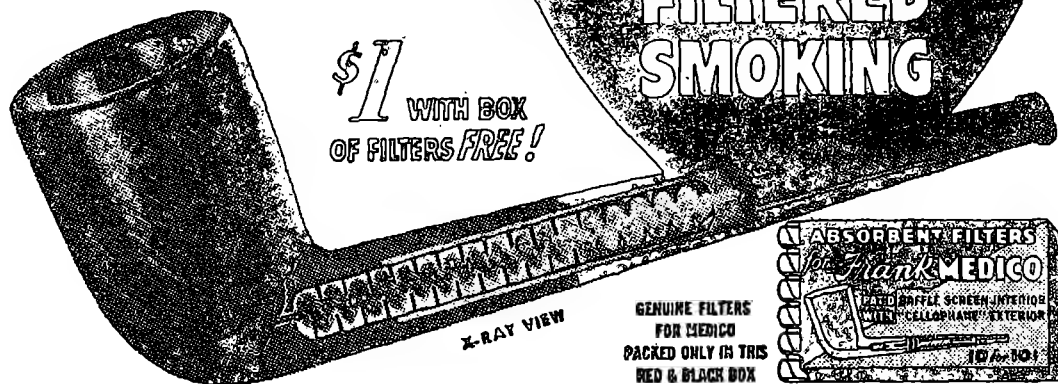
Dear Kiwi Sarge: What happened to you, man. Come on, you might as well confess. I know you like your little jokes but this one's on nature. As I stepped into my local black market to purchase my copy of T.W.S., what do I see?

No, let me tell you. On the cover of T.W.S., stands a cute little chick with transparent slacks. Now don't get me wrong. I'm not complaining, but you must admit it's a new angle.

I remember four long years ago you would have anything from a space goon to a pair of helmets with mermaid draped around them on the front cover. Now look at yourself just a plain bum (space). I will now rate your stories.

1. The Giant Runt—R. Rocklyne.
2. Horatius At The Bridge—F. Ferry.
3. Terror In The Dust—P. S. Powers.
4. The Devouring Tide—P. Cross.

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5. God Of Light.—L. A. Eshbach.  
6. Helicopter Invasion—F. Smith.  
—1522 Unionport Rd., Bronx 62, N. Y.

Is it possible that it is a conspiracy after all? Can it be that Kiwi Krueger is not alone in his octopusian conspiracy against curvaceous cuties in the kind of clothing Kiwi Frank is self-admittedly so envious of? Are there perhaps scores, hundreds or, perhaps, thousands of apparent humans whose sheep's clothing—of heaviest long-staple wool—conceals not wolves, but eight-legged monsters on vacation from the deep?

With the Axis out of the way, will an uprising of these gelatinous scavengers be the next thing to threaten the safety of good old *Homo Sapiens*? It's something to mull over while flouting the low of gravity on a rocket jaunt through the Pleiades on Sunday afternoons.

## DIS IS MOIDER!

By Tom Pace

Dear Sarge:  
Heigh-ho! TWS is out again, huh? Some cover! Very neat, Earle K. The dame looked a little too horrified, if you get me. But otherwise. . .

I note that the "bare-back trend" is working in the future's fashions as well as now.

Meanwhile, the fiction. Ahhh . . . very good this flight. A bit better than last ish. . .

The best was Cross' "Devouring Tide." I go for this sort of stuff without qualifications. But (I luv dat word!), a gent named Chan Corbett did a very similar yarn back in '37. The "tide" the invasion . . . the return to amoeba-form . . . all were there. Nevertheless, I went for this story.

Ahhhhh, the "God of Light!" Number two, for the same reason as above. I like dis kind of fantasy.

Number three is the DePina tale. I like Hasse, and his disciple can place the same beauty into a yarn. The exotic settings and descriptions in the Hasse-DePina stories get me every time. Lyric.

"The Giant Runt" is fourth. Neatly done, Ross. Who says Ross writes hack? Fifth is "Error in the

(Turn page)

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Dust" . . . there's a horror yarn for you . . . and Frank Ferry Am. Contest tale gets sixth place. To repeat myself, neat! Ford Smith must be an entomologist. Those tales aren't exactly ordinary S-F, but who wants ordinary stuff.

Donnell had the best pic . . . ho brother, whatta babe! Marchioni has improved a little. Morey has done much better than this. I have 1930 issues, with better Morey pix in them than these.

And now . . . the reader speaks, and speaking, moves on, nor all your tears can persuade him not to return.

Joe Kennedy is almost as bad an artist as I am.

Taurals had some good suggestions, but please, don't do any combining of magazines! But do get Morey (and watch him), and Wesso (by all means!), and Schomberg, one of the best aviation artists in the biz.

I agree unreservedly with all those who praise Brackett's "Veil of Astellar." As I have stated, unless something mighty good turns up, this will be best-of-the-year by me.

Joe Kennedy is a screwball, but he's a likeable boy. Too bad he isn't a better poet look what's talking.

As for the Pro-Con discussing and cussing, I am definitely Pro—for Fantasy. And weird-horror too. To quote H. P. Lovecraft: ". . . who shall declare the dark theme a positive handicap? Radiant with beauty, the Cup of the Potemles was carved of onyx."

Jhettong ko Tal (?????) has the best letter in the issue. No doubt because I didn't understand a word. But I think, ko Tal, that a better name for Man would be . . . "Homo Sap."

For our follies are as the winds that blow,  
And our sins are as the sands,  
And there's not a one of all Mankind,  
But what has bloody hands.

And that is not a quotation. 'Tis original.

James Russell Gray's ESP discussion seems fraught with interest. Has any other fan had experiences which seem to point to extra-sensory perception? I have. Maybe we can uncover some "sensitives" for all De Pina!

Not bragging about my own perceptive faculties, y'unnerstand.

Just wondering. Be-see'n' ya!—Eastaboga, Ala.

Brother, what a vernacular, what slang, what a massacre! When you put on a blast of your own copyrighted version of the English language, it takes the hide right off a rocket ship. And what poetry, what scansion, what a meter—in fact, what a finish for "The Reader Speaks!" It's time to close up anyway. The Sarge is out of Xeno. Suffering planetoids, I warned you, Frog-eyes.

## THE AMATEUR STORY CONTEST

AND once again, pee-lots, we can announce a winner in the contest. Private Fox B. Holden of the Army Air Forces has managed to find enough time off from his duties at Atlantic City to dish up a first class short story called "Stop, Thief," which will see the editorial light of day in our next issue.

If any of the rest of you want to enter the contest, it's simple as you please. Just type your story out in any length up to six thousand words on one side of standard white typewriter paper. Double space your lines and leave a reasonable margin around the edge of the page for the editors to work on—an

## NEXT ISSUE'S NOVEL

## FOG OVER VENUS

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Scientific Adventure

By ARTHUR K. BARNES



inch or more. The whole field of science-fiction is your meat.

There is just one restriction. No entrant will be considered who has ever before sold a fiction story to any accredited publication. Address your chef d'ouvres to the Amateur Story Contest Editor, THRILLING WONDER STORIES, 10 East 40th Street, New York 16, New York.

Winners will receive payment at our regular professional rates. Honorable mention will be given stories worthy of such notice that do not quite make the grade. This contest runs constantly, and it is our purpose to justify it by discovering plenty of new writers. So get your entry in as soon as you can.

## THE SCIENCE-FICTION LEAGUE

**I**T CONTINUES to be a quiet Summer on this front, although a number of letter writers have asked for membership in the league. Among them is Mrs. Amy Frankey, of 3145 Trumbull Avenue, Detroit, Michigan.

Mrs. Frankey is anxious to get in touch with Walter Dunkelberger, who wrote in the last issue, asking for Detroit fans with whom he could found a new chapter and receive a charter. All right, Mrs. Frankey, Walter's address is 13618 Cedar Grove Avenue of the same city. Good luck, and let's hope we get a request from a charter soon as the result of your combined efforts.

Should any other group or groups of TWS readers wish to found a local chapter, here is how to do it. You assemble a quorum of seven or more members, adopt a chapter name, elect officers, frame a constitution and write in to the mother league here in New York for a charter.

If you wish to join the SFL as an individual, simply fill out the application coupon you will find in this department and send it to us with the name-strip of this magazine. This will win you a membership card without further expense or obligation. Should you desire an emblem to wear, include 15c in stamps with your application, and the old Sarge will send you a snappy gold, blue and maroon SFL button.

Happy star journeys.

—SERGEANT SATURN.

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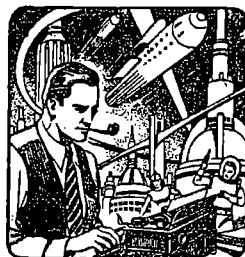
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# THE STORY BEHIND THE STORY

**W**RITING in the nick of time from his astrogated retreat from the din and clamor of urban civilization at Beechhurst, New York, Murray Leinster sends us an explanation of one factor in **THE ETERNAL NOW** that has had editors tearing their hair out in large divots.

This business of how humans deprived of mass would react to gravity and the all-around



deceleration of movement around them is a tricky one to say the least—and Murray's explanation of the apparent normal that results in his swell novel is perhaps a trifle more involved than the problem itself.

But Leinster is a pseudo-scientist to beware of—this warning is for those of you who delight in ripping helpless authors to shreds in **THE READER SPEAKS**—and one who can, as his explanation below will reveal, talk the atomic cuticle off a corundum rocket ship landing strip. So beware.

However, since no human has ever been so demassed and lived in known history, it seems to us that we will have to accept Murray's explanation as given in this column and keep our fingers crossed in hope that he is right. Take a look at it and see what he has to say.

I don't know how "The Eternal Now" got started in my head. I like to putter around with ideas, turning them inside out and upside down. For instance, I'm planning a story now, based on the fact that everybody has read about men seeing sea-serpents, but nobody ever wondered how a sea-serpent would feel if he saw a man. (Editor's note: This

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# PI IN THE SKY

*A Hilarious Novelet*

**By FREDRIC BROWN**

**COMING IN THE NEXT ISSUE**

story, "De Profundis" has been written and will appear in an early issue of THRILLING WONDER STORIES.) And I suppose one could have fun with a snake that saw a man with delirium tremens.

Anyhow, "The Eternal Now" came out of such messing around with ideas. Everybody knows that mass and energy are theoretically interchangeable and that one's time-rate—rate of experiencing events, metabolism, etc.—is somehow tied in. At the speed of light less—say—one-twenty-thousandth, one's mass would be practically infinite, and one's sensation of time passing would be so slowed that only seconds would seem to pass in what to a more normal world would seem centuries.

So I began to wonder what would happen under exactly reversed conditions, near-zero mass and the necessarily associated accelerated time-rate. Since there is no readily imaginable "negative speed," I had somebody invent a mass-nullifier to bring about the theoretically connected conditions.

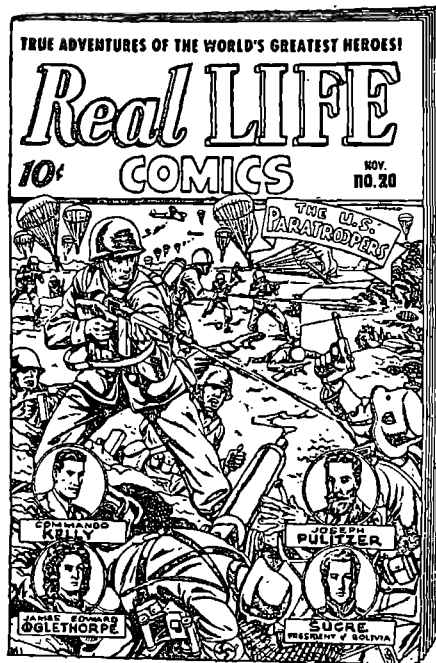
One thing annoyed me a lot. One of the most interesting of the consequences of nullification of mass couldn't be expounded in the story because it would have slowed things up. The people in "The Eternal Now" walk around quite normally, although it might seem that they couldn't, if the acceleration of gravity is fixed at 32 feet per second.

It would seem that if they let go of something they could never detect its fall, could not fall themselves, etc. But I think they could. Because the acceleration of mutual attraction varies as the inverse square of the distance (of course) and in proportion to relative mass!

A man falls toward the earth at 32 ft. sec. acceleration—but the earth also falls toward him .0001 X minus God-knows-what feet per second. The point is that acceleration involves the storage of energy as velocity in a falling object, and as momentum. The greater the mass, the greater the storage of energy. There has to be mass for there to be inertia.

If there is no inertia, there can be no momentum, no storage of energy—and no resistance to acceleration, hence no limit to the rate of acceleration by gravity. If you picture two objects in space and reflect that their acceleration toward each other is divided in proportion to their mass, and then imagine one having practically no mass, though subjected to the same attractive force—why, there you are. The result of all this involved reasoning is that the people in "The Eternal Now" would notice nothing odd about gravity—except that it seemed to be normal. Sincerely—Murray Leinster.

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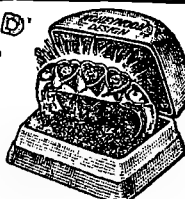
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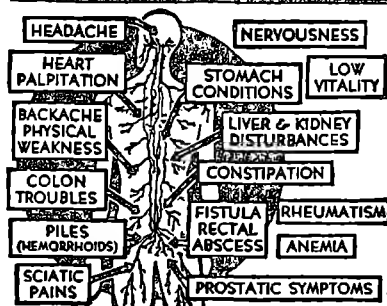


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## THE GADGET GIRL

(Concluded from page 88)

The abyss sprang suddenly into swaying light—chairs and people's legs as they crowded forward. Tubby knew that he was on the floor by his overturned chair, with the lecture platform in front of him and people of the excited audience jamming around. Jake helping him, he struggled and sat up.

"I'm all right," he gasped. "What's all the excitement?"

Close at hand a figure leaned over him—a tall, skinny, hatchet-faced female. The lecturer's efficient assistant. A first-aid kit was in her hand, and she was proffering Tubby a small vial. She reminded him of someone. Angelina! That's who she was like—the professor's gadget girl.

"Smelling salts," said the hatchet-faced female. "Aromatic spirits of ammonia. And I'd advise you to stop drinking, young man."

"Not been drinking," Tubby muttered. "Lemme out of here."

There was certainly no one in the lecture hall who was anything but glad to have Tubby and his friends go. The lecturer was resuming:

"And as I was saying before the unseemly interruption, the power of thought is—"

"That's a swell assistant he's got," Jake whispered admiringly. "Unusual woman, so quiet and efficient."

Tubby thought of that other quiet and efficient woman, Angelina, and shuddered.

"Yeah," he said, "she's okay, I guess, but not my type."

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## A WORD TO THE PATRIOTIC

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In his own case, he was brought back to splendid health. He acquired wealth, too, as well as world-wide professional recognition. Thirty years ago, he was sick as a man could be and live. Once his coffin was bought. Years of almost continuous tropical fevers, broken bones, near blindness, privation and danger had made a human wreck of him, physically and mentally.

He was about to be sent back to England to die, when a strange message came — "They are waiting for you in Tibet." He wants to tell the whole world what he learned there, under the guidance of the greatest mystic he ever encountered during his twenty-one years in the Far East. He wants everyone to experience the greater health and the

Power, which there came to him.

Within ten years, he was able to retire to this country with a fortune. He had been honored by fellowships in the World's leading geographical societies, for his work as a geographer. And today, 30 years later, he is still so athletic, capable of so much work, so young in appearance, it is hard to believe he has lived so long.

As a first step in their progress toward the Power that Knowledge gives, Mr. Dingle wants to send to readers of this paper a 9,000-word treatise. He says the time has come for it to be released to the Western World, and offers to send it, free of cost or obligation, to sincere readers of this notice. For your free copy, address The Institute of Mentalphysics, 213 South Hobart Blvd., Dept. K-280, Los Angeles 4, Calif. Readers are urged to write promptly, as only a limited number of the free books have been printed.



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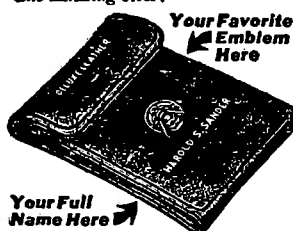
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